

```
13 14 18
              21
                 2.2
                     42
                         47
ring nodes :
                   7
                     8
                         9
                           10 11 24 25 26 27
   1 2 3 4
              5
                 6
                                                 28 29 30 31
                                                               32
                                                                   33
   34 35 36
             37 38
                     39
                         40
                            41
chain bonds :
   9-13 11-47 13-14
                    14-18
                           18-21
                                  18-22
ring bonds :
   1-2 1-6 2-3 3-4 4-5 5-6 5-7
                                  6-11
                                        7-8 8-9 9-10 10-11 24-25
   24-29 25-26 26-27 27-28 28-29
                                  30-31 30-35 31-32 32-33 33-34
   34-35 36-37 36-41 37-38 38-39 39-40 40-41
exact/norm bonds :
   5-7 7-8 9-10
                 9-13 10-11 11-47 13-14 14-18
                                               18-21
                                                       18-22
exact bonds :
   6-11 8-9 26-42
normalized bonds :
   1-2 1-6 2-3 3-4 4-5 5-6 24-25 24-29 25-26 26-27 27-28 28-29
   30-31 30-35 31-32 32-33 33-34 34-35 36-37 36-41 37-38 38-39
   39-40 40-41
isolated ring systems :
   containing 1 :
```

G1:C, N

G2:C,O

G3:[*1],[*2],[*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 13:CLASS 14:CLASS 18:CLASS 21:CLASS 22:CLASS 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:CLASS 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:CLASS 47:CLASS

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=> d his
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(FILE 'HOME' ENTERED AT 20:54:45 ON 13 AUG 2003)
     FILE 'REGISTRY' ENTERED AT 20:54:50 ON 13 AUG 2003
L1
                STRUCTURE UPLOADED
L2
                QUE L1
L3
             29 S L2
L4
            703 S L2 SSS FUL
     FILE 'CAPLUS' ENTERED AT 20:55:28 ON 13 AUG 2003
L5
            162 S L4
     FILE 'REGISTRY' ENTERED AT 20:55:58 ON 13 AUG 2003
L6
                STRUCTURE UPLOADED
L7
                QUE L6
L8
             21 S L7
            572 S L7 SSS FUL
L9
     FILE 'CAPLUS' ENTERED AT 20:59:17 ON 13 AUG 2003
L10
            146 S L9
     FILE 'REGISTRY' ENTERED AT 20:59:37 ON 13 AUG 2003
     FILE 'CAPLUS' ENTERED AT 21:00:09 ON 13 AUG 2003
L11
            ANALYZE L10 1- RN HIT :
                                     571 TERMS
     FILE 'REGISTRY' ENTERED AT 21:00:55 ON 13 AUG 2003
L12
              1 S 108895-98-3/RN
L13
            100 S 146373?/RN
L14
            100 S 204322?/RN
L15
            100 S 146135?/RN
L16
            100 S 103373?/RN
L17
            100 S 155452?/RN
L18
           100 S 208847?/RN
L19
            100 S 136234?/RN
L20
             3 S L9 AND L13
L21
             1 S L9 AND L14
L22
             2 S L9 AND L15
L23
             2 S L9 AND L16
L24
             2 S L9 AND L17
              2 S L9 AND L18
L25
L26
             1 S L9 AND L19
L27
            566 S L9 NOT (L20 OR L21 OR L25)
     FILE 'CAPLUS' ENTERED AT 21:09:06 ON 13 AUG 2003
L28
           135 S L27
L29
             92 S L28 AND PATENT/DT
             43 S L28 NOT L29
L30
L31
              2 S L30 AND 2003/SO
L32
              4 S L30 AND 2002/SO
L33
            131 S L28 NOT L32
L34
            ANALYZE L33 1- RN HIT :
    FILE 'REGISTRY' ENTERED AT 21:11:11 ON 13 AUG 2003
L35
          100 S 209985?/RN
L36
            11 S L27 AND L35
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FILE 'CAPLUS' ENTERED AT 21:12:15 ON 13 AUG 2003
     FILE 'REGISTRY' ENTERED AT 21:14:16 ON 13 AUG 2003
L37
                STRUCTURE UPLOADED
L38
                QUE L37
L39
             15 S L38 SUB=L9 SAM
L40
                STRUCTURE UPLOADED
L41
                QUE L40
             12 S L41
L42
L43
            400 S L41 SUB=L9 FUL
     FILE 'CAPLUS' ENTERED AT 21:17:39 ON 13 AUG 2003
L44
            121 S L43
L45
             24 S L33 NOT L44
     FILE 'REGISTRY' ENTERED AT 21:19:25 ON 13 AUG 2003
L46
            397 S L43 NOT (L20 OR L21 OR L25)
     FILE 'CAPLUS' ENTERED AT 21:19:52 ON 13 AUG 2003
L47
            111 S L46
L48
            433 S FELDMAN P?/AU
L49
              3 S L47 AND L48
L50
              1 S L49 AND PATENT/DT
                SELECT RN L50 1-
     FILE 'REGISTRY' ENTERED AT 21:21:12 ON 13 AUG 2003
L51
            185 S E1-185
L52
            108 S L46 AND L51
L53
            77 S L51 NOT L52
    FILE 'CAPLUS' ENTERED AT 21:22:57 ON 13 AUG 2003
L54
             3 S L52
L55
            108 S L47 NOT L54
L56
            75 S L55 AND PATENT/DT
            33 S L55 NOT L56
L57
L58
             0 S L57 AND 2003/SO
L59
              2 S L57 AND 2002/SO
L60
             4 S L57 AND 2001/SO
L61
             1 S L57 AND 2000/SO
L62
           106 S L47 NOT (L59 OR L60 OR L61)
=> d 17
L7 HAS NO ANSWERS
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L6

STR

G1 C,N

G2 C,O

Structure attributes must be viewed using STN Express query preparation. L7 QUE ABB=ON PLU=ON L6

=> d ibib abs hitstr 162 1-106

09/980,680

L62 ANSWER 1 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:490975 CAPLUS
DOCUMENT NUMBER: 119:69297
ITILE: Benzodiazepinone derivatives as bradykinin B2 receptor antagonists, preparation thereof, and use for treating antagonists, preparation thereof, and use for treating pain Leung, Carmen Santhauar, Vijayaratnam; Tomaszewski, Miroslavy Woo, Simon Astrazeneca AB, Swed. PCT Int. Appl., 203 pp. CODEN: PIXXD2

INVENTOR(5):

PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| | | NO. | | KI | ND | DATE | : | | A | PPLI | CATI | ON N | ο. | DATE | | | |
|-------|------|-------|-------|-----|-----|------|------|------|------|------|------|------|-----|------|------|------|------|
| | | | | | | | | | - | | | | | | | | |
| ¥o | 2003 | 30512 | 75 | Α | 2 | 2003 | 0626 | | | O 20 | 02-S | E230 | 9 | 2002 | 1211 | | |
| | ٧: | AΕ, | AG, | AL, | AM, | AT, | AU, | AZ, | Bλ, | BB, | BG. | BR. | BY. | BZ. | CA. | CH. | CN. |
| | | œ, | CR, | cu, | cz, | DE, | DK, | DΜ, | DZ, | EC. | EE. | ES. | FI. | GB. | GD. | GR. | GH. |
| | | GΜ, | HR, | нu, | ID, | IL, | IN, | IS, | JP. | KE. | KG. | KP. | KR. | XZ. | IC. | LK. | I.R |
| | | LS, | LT, | LU, | LV, | MA, | MD. | MG. | MK. | MN, | MV. | XX. | MZ. | NO. | N7 | OM. | DU. |
| | | PL, | PT, | RO, | RU, | SC, | SD. | SE. | SG. | SK, | SL. | TJ. | TM. | TN. | TD, | TT. | 77 |
| | | UA, | UG, | US, | UZ, | VC. | VN. | YU. | ZA. | ZM, | ZW. | AM. | AZ. | RY. | KC. | ¥7 | MD. |
| | | RU, | ŤJ, | TM | | | | | | , | , | , | , | ٠., | , | , | 110, |
| | RV: | GH, | GΗ, | KE, | LS, | MV, | MZ. | SD. | SL. | SZ. | TZ. | UG. | 7M. | 79. | AT. | RF | BC. |
| | | CH, | CY, | CZ, | DE, | DK. | EE. | ES. | FI. | FR. | GB. | GR. | IR. | 17 | 131 | MC. | WI. |
| | | PT, | SE, | SI, | SK, | TR, | BF. | BJ. | CF. | CG, | CI. | CH. | GA. | GN. | 60 | car, | MT. |
| | | MR, | NE, | SN, | TD, | ŤG | | | | | , | | ٠, | ٠,,, | ٠,, | ٠., | 110, |
| ORITY | APP | LN. | INFO. | . : | | | | | SE 2 | 001- | 4248 | | A | 2001 | 1214 | | |
| ER SO | URCE | (5): | | | MAD | DAT | 130. | 6020 | , . | | | | | | | | |

A method is claimed of treating pain in a warm-blooded animal, comprising the step of administering a therapeutically effective amt. of benzodiazepinones (shown as I. variables defined below; e.g. N-(7-chlor-0-2, 3-dinyfor-1-methyl-2-cxo-5-phenyl-HR-1, 4-benzodiazepin-3-yl)-N'-(5-isoquinolinyl)thiourea), pharmaceutically acceptable salts thereof, diastereomers thereof, enantiomers thereof, or mixts. thereof. For I: RI (un)substituted acyl, slkyloxycarbonyl, alkyl, heteroalkyl, cycloalkyl, aryl, heterocyclyl; aryl-Cl-6-alkyl, and heterocyclyl-Cl-6-alkyl, or a

L62 ANSWER 2 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:490914 CAPLUS
DOCUMENT NUMBER: 139:69296
TITLE: Preparation of benzodiazepinon

139:69296
Preparation of benzodiazepinones and a benzodiazepinone combinatorial library as potential bradyktini receptor antagonists
Leung, Carmenr Santhakumar, Vijayaratnam; Tomaszewski, Miroslaw; Voo, Simon Astrazeneca AB, Swed, PCT Int. Appl., 207 pp.
CODEN: PIXXD2
Patent INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

English

FAMILY ACC. NUM. COUNT:

| PATENT INFOR | | | | | | | | | | | | | | | | | | | | | |
|--------------------|------------------------|-----|-----|-----|------|-----------|------|-------|----------------|------|-----------------|-----|----------|------|-----|------|--|--|--|--|--|
| PATENT | PATENT NO. K | | | | | KIND DATE | | | | | APPLICATION NO. | | | | | DATE | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| WO 2003 | 0512 | 74 | A | 2 | 2003 | 20030626 | | | WO 2002-SE2306 | | | | 20021211 | | | | | | | | |
| ₩; | ΑE, | ΑG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB. | BG. | BR. | BY. | BZ. | CA. | CH | CN. | | | | | |
| | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC. | EE. | ES. | FI. | GB, | GD. | GP. | GH, | | | | | |
| | GM, | HR, | HU, | ID, | IL. | IN. | IS. | JP. | KE. | KG. | KP. | KB. | KZ, | ic, | I.E | I D | | | | | |
| | LS, | LT, | LU, | LV, | MA, | MD. | MG. | MK. | MN. | MT. | MX. | M2 | NO, | N7 | OM. | DU. | | | | | |
| | PL, | PŢ, | RO, | RU, | SC, | SD. | SE. | SG. | SK. | SL. | T.I. | TM. | TN, | TD, | TT. | T7 | | | | | |
| | UA, | UG, | US, | UZ, | VC. | VN. | YU. | ZA. | ZM. | ZW. | ΔM. | A7 | BY, | VC. | ¥7, | MD, | | | | | |
| | RU, | ΤJ, | TM | | | | | | , | , | , | , | υι, | 100, | Ke, | no, | | | | | |
| RW: | GH, | GM, | KE, | LS, | MW. | MZ. | SD. | SL. | SZ. | T2. | tic | 7M | 70 | A.T | DE | DC. | | | | | |
| | CH, | CY, | CZ, | DE. | DK. | EE. | RS. | FI. | FR. | GB. | GB, | IF. | IT, | 711 | DE, | MI. | | | | | |
| | PT, | SE, | SI, | SK, | TR. | BF. | BJ. | CF. | CG. | CT. | CM. | GA, | GN, | GO, | au, | ML, | | | | | |
| | mĸ, | NE, | SN, | TD. | TG | | , | , | , | ٠., | ٠., | un, | o., | υę, | u., | nı, | | | | | |
| PRIORITY APP | PRIORITY APPLN. INFO.: | | | | | | | SE 20 | 201- | 4250 | | | 2001 | 214 | | | | | | | |
| OTHER SOURCE GI | (S) : | | | MAR | PAT | 139:6 | 5929 | 6 | | -230 | | ^ | 2001 | | | | | | | | |

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Page 4

ANSWER 1 OF 106 CAPLUS COPYRIGHT 2003 ACS on STW (Continued) divalent Cl-12 group that together with a 2nd N of X form a ring; X is a divalent group including a lest N atom and the 2nd N atom, wherein a let group is linked to the 1st N atom and RI is linked to the 2nd N atom, and wherein the 1st and 2nd N atoms are sept, by either one C atom, or two C atoms wherein said two C atoms have a double bond there between. R3 is (un) substituted arry, Cl-12alkyl, C3-12cycloalkyl, or beterocyclyl; R4 - H, halogen, (un) substituted alkyl, (un) substituted heteroalkyl, nitro, cyano, bydrosy, OR6, SK6, S(0)R6, S(0)R6, C(0)R6, C(8)R6, KR786, C(0)NR6, NR7C(0)R6, SG2.KR7R6, NR7SO2R6, or C(0)OR6; and R5, R6 and R7 - H, (un) substituted cl-6alkyl. Thirty-three examples of I were tested for binding to B2 bradykinin and ranged from 43-3110 cM (dissocn. const.); no individual values are reported. Although the methods of prepn. are not claimed, 26 example prepns. of I and 31 of intermediates are included. More than 100 examples of I prepd. combinatorially are tabulated with LCMS anal. results.

108895-98-3, (2,3-0)bhydro-2-oxo-5-phenyl-1H-1,4-benzodiszepin-3-yl)carbanic acid phenylmethyl ester

RL: NCT (Reactant): RACT (Reactant or reagent) (prepn. of benzodiazepinone derivs. as bradykinin B2 receptor antagomists and use for treating pain)

108895-98-3 CAPLUS

Carbanic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

155452-87-2 CAPLUS

Carbanic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-HH-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 2 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

Benzodiazepines I (Rl = alkyl, cycloalkyl, heteroalkyl, aryl, heterocyclyl, aralkyl, heteroarylalkyl, acyl, alkoxycarbonyl; R3 = alkyl, cycloalkyl, aryl, heterocyclyl, aralkyl, heteroarylalkyl, acyl, alkoxycarbonyl; R3 = alkyl, cycloalkyl, aryl, heteroarylalkyl, acyl, heteroarylyl, ozn, cyano, HO, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, acyl, alkylsulfonylamino, mainocarbonyl, aminosulfonyl, acyl, alkylsulfonylamino, alkoxycarbonyl; R5 = h, (unl substituted aminomethylamino or aminocathonylamino; Rl and X may form a ring; Rl, R3, R4, X may all be substituted with alkyl groups] are prepd. both by classic synthetic techniques and as members of a combinatorial library, I are human B2 bradykinin receptor antagonists with K1 values between 43 and 3110 Mt. Thus, treatment of 6-chloro-1-methyl-ZH-3,1-benzowazinone with glycine, chlorination with FCCl3, Pd-catalyzed coupling of the resultant chloroimine with 2.4-dimethoxy-5-pyrimidineboronic acid, azidation with trisyl azide, Staudinger reaction of the azide with resin-bound triphenylphosphine, acylation of the free amine with thiophospene, and addn. of 4-(diethylamino)-2-methylamiline to the isothiocyanate yields the benzodiazepine II. Methods for the synthesis of benzodiazepin-2-ones followed by deprotection, acylation of the free amine with either phospene or thiophospene, and addn. of amines to the isocyanates or isothiocyanates formed in the previous step are claimed. Methods for the synthesis of I by palladium-mediated coupling of boronic acids with 5-halobenzo-1,4-diazepin-2-ones followed by regioselective azidation at the 3-position of the henzodiazepinone and Staudinger reaction of the azide with triphenylphosphine are also claimed. I may be useful as potential analgesics (no data).

[Prepp. of benzodiazepinones as human B2 bradykinin receptor antagonists for the potential treatment of pain) 10649-47-2 CAPUS

551937-67-8 CAPLUS
Carbamic acid, [7-chloro-2,3-dihydro-2-oxo-5-phenyl-1-(2-propenyl)-lH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 2 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 3 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

155452-87-2 CAPLUS
Carbanic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yll-, phenylmethyl ester (9CI) (CA INDEX NAME)

168162-29-6 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
1,1-dinethylethyl ester (9CI) (CA INDEX NAME)

209985-28-4 CAPLUS

Carbanic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-17-1P 209985-20-6P 209985-25-1P 209985-32-0P 209985-33-1P 209986-63-0P

Page 5

L62 ANSWER 3 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:168839 CAPLUS
DOCUMENT NUMBER: 138:205345
Preparation of cyclic anino acid compounds for inhibiting .beta.-amyloid peptide release and/or its synthesis
INVENTOR(S): Audia, James E.; Dressman, Bruce A.; Shi, Qing
Elan Pharmaceuticals, Inc., USA; Eli Lilly & Company
SUNCE: USCAM
DOCUMENT TYPE: Patent

CODEN: USCAM

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-------------------|----------|
| | | | | |
| US 6528505 | Bl | 20030304 | US 1999-338180 | 19990622 |
| US 6552013 | B1 | 20030422 | US 1999-338121 | 19990622 |
| US 6569851 | B1 | 20030527 | US 1999-338191 | 19990622 |
| US 2003149022 | A1 | 20030807 | US 2002-326081 | 20021223 |
| PRIORITY APPLN. INFO. | . : | | US 1998-160067P P | 19980622 |
| | | | US 1998-155238P P | 19980930 |
| | | | US 1998-150704P P | 19980930 |
| | | | US 1998-162757 A | 19980930 |

OTHER SOURCE (S):

US 1998-150704F P 19980930
US 1998-150704F P 19980930
US 1998-150704F P 19980930
US 1998-162757 A 19980930
US 1999-338121 A3 19990522
HER SOURCE(S): MARPAT 138:205345
Fused azepinone amino acid derivs. R'R'NCHRICONHCHR2CONH-W and
R'NC(:RI]CONHCHR2CONH-W [RI and R' combine to form a nitrogen-contq.
optionally-substituted (un)satd. heterocyclyl or heteroaryl group: R' is
H, (un)substituted alkyl or aryl: R2 is (un)substituted (cyclo)alkyl,
alkenyl, alkynyl, (heterojaryl, or heterocyclyl: W is (un)substituted
nono- or dibenzo- or dicyclohexano(hydro)azepin-2-on-3-yl) were prepd. for
inhibition.beta.-amyloid peptide release and/or its synthesis, and
accordingly have utility in treating Alzheiner's disease. Thus,
5(5)-[(N-L-prolyl-L-alanyl)amino]-7-methyl-5,7-dihydro-6Hdibenz[b,d]azepin-6-one was pred. by acylation of 5(5)-amino-7-methyl-5,7dihydro-6H-dibenz[b,d]azepin-6-one hydrochloride with Boc-Pro-Ala-OH (Boc
tert-butoxycarbonyl), followed by deprotection. Compds. of the
invention inhibit .beta.-amyloid peptide prodn. by at least 30% as
compared to the control when employed at 10 .mu.g/mL.
108895-98-3 155452-87-2 168162-29-6
RE: RCT (Reactant), RACT (Reactant)

209995-28-6
RL: RCT (Reactant): RACT (Reactant or reagent)
 (prepn. of cyclic amino acid compds. for inhibiting .beta.-amyloid
 peptide release and/or its synthesis)
108955-93-3 CAPUS
Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-

108895-98-3 CAPLUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyi-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 3 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 209986-66-3P

209985-20-6 CAPLUS
Carbamic acid, [7-bromo-5-(2-fluorophenyl)-2,3-dibydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS
Carbamic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-32-0 CAPLUS
Carbanic acid, (2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 3 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-33-1 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209986-63-0 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-1-(2-oxo-2-phenylethyl)-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

209986-66-3 CAPUS Carbanic acid, [2,3-dihydro-2-oxo-5-phenyl-1-{4,4,4-trifluorobutyl}-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester [9CI] (CA INDEX NAME)

INVENTOR(S):

DATE OF THE PARENT NO.

DATE OF THE PARENT NO.

138:90000

Preparation of heterocyclic compounds and their use for inhibiting .beta.-amyloid peptide release Thorsett, Eugene D.; Porter, Warren J.; Nissen, Jeffrey S.; Latimer, Lee H.; Audia, James E.; Droste, James

PATENT ASSIGNEE(S):

Athena Neurosciences, Inc., USA; Eli Lilly Company U.S., 99 pp.

CODEN: USCOCAM
PARENT ACC. NUM. COUNT:
PATENT INFORMATION:

PATENT NO.

PATENT NO. KIND DATE APPLICATION NO. DATE
US 1998-32019 19980227
US 2002-246558 20020919 US 6506782 US 2003130188 PRIORITY APPLN. INFO.: OTHER SOURCE(5): B1 20030114 A1 20030710 US 2002-246 US 1998-32019 MARPAT 138:90080

Disclosed are modified heterocyclic di- and tripeptide analogs which inhibit .beta.-amyloid peptide release and/or its synthesis and, accordingly, have utility in treating Alzheimer's disease. Compds. of formula RINHCHM2 (COMMICHS) [COMMICHSC] (RMA) PR [R] = H or acyl; RZ, RS, R6 - (un) substituted alk(en) (yn)yl, cycloslkyl, (heterolaryl, heterocyclyl; p - 0 or 1; R3and R4 combine to form a heterocyclic ring, which may be substituted) are claimed. Also disclosed are pharmaceutical compns. comprising a compd. which inhibits .beta.-amyloid peptide release and/or its synthesis as well as methods for treating Alzheimer's disease both prophylactically and therapeutically with such pharmaceutical compns. Title compds., e.g. 1, were prepd. in a multistep synthesis and inhibited .beta.-amyloid peptide prodn. by at least 30% as compared to control. 153452-87-2 209985-22-8 209985-28-4
RL: RCT (Reactant): ARCT (Reactant or reagent) (prepn. of heterocyclic compds. and their use for inhibiting .beta.-amyloid peptide release)
153452-87-2 CARUS
Carbanic acid. (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazenia-1-IT

Carbanic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 3 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

REFERENCE COUNT:

THERE ARE 121 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE 121

L62 ANSWER 4 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-22-8 CAPLUS 203985-22-0 CAPUS
Carbamic acid, (7-bromo-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-28-4 CAPLUS Carbamic acid, {7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-17-1P 209985-20-6P 209985-25-1P
209985-32-0P 209985-33-1P
RL: RCT (Reactant), Sym (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preph. of heterocyclic compds. and their use for inhibiting (preph. analyloid peptide release)
20985-17-1 CAPUS
Carbanic acid, (7-chloro-2,3-dibydro-1-methyl-2-oxo-5-phemyl-1H-1,4-benzodiazepin-3-yl)-, phemylmethyl ester (9CI) (CA INDEX NAME)

162 ANSWER 4 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

209985-20-6 CAPLUS
Carbanic acid, [7-brono-5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS Carbanic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-32-0 CAPLUS Carbamic acid, (2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

OF 106 CAPLUS COPYRIGHT 2003 ACS on STN BER: 2002:946275 CAPLUS ER: 138:14079

138:14079
Preparation of benzodiazepinones as cyclic nucleotide phosphodiesterase (particularly PDE4) inhibitors useful as antiinflammatories
Bourguignon, Jean-Jacques, Lagouge, Yan, Lugnier, Clairer Klotz, Eveliner Macher, Jean-Paul; Raboisson, Pierrer Schultz, Dominique Neuro3d, Fr.
PCT Int. Ann. 124.00

INVENTOR(S):

PATENT ASSIGNEE (S): SOURCE:

PCT Int. Appl., 124 pp. CODEN: PIXXD2

DOCUMENT TYPE:

French 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PA' | TENT | NO. | | KI | ND | DATE | : | | A | PPLI | CATI | ON N | io. | DATE | : | | |
|----------------------|------|-------------------|--------------------------|-------------------|-------------------|--|-------------------|------------|------------|-------------------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| WO WO | 2002 | 0988 | 65 | A | | 2002 | | | | | 02-F | | 2 | 2002 | 0607 | | |
| | W: | GM, LS, PL, | HR, LT, PT, UG, | HU, LU, RO, | ID, LV, RU, | AT, DE, IL, MA, SD, VN, | IN, MD, SE. | IS, MG, | JP, MK, | EC, KE, MN, | KG, MW, | ES, KP, MX, | FI, KR, MZ, | GB, KZ, NO, | GD, LC, NZ, | GE, LK, OM, | GH, LR, PH, |
| PRIORITY OTHER SO | APP | BF, | BJ, INFO | CF, | ĊĠ, | MW, FI, CI, | CM, | GA, | GN, | GQ, | | LU, | MC, MR, | NL, NE. | PT, SN. | | |

The invention concerns novel benzodiazepinone derivs. (shown as I; variables defined below; e.g. 7,8-dimethoxy-1-(2-naphthyl)-3-methyl-3,5-dihydro-4H-2,3-benzodiazepin-4-one) and their uses in therapy, particularly for treating pathologies involving the activity of a phosphodiesterase of cyclic nucleotides, particularly PDDE (data included). The invention also concerns nethods for prept and intermediates and many example prepns. are included. For example, 7,8-dimethoxy-3-methyl-1-(1-naphthyl)-3,5-dihydro-4H-2,3-benzodiazepin-4-one was prepd. in 314 yield by beating Ne (4,5-dimethoxy-2-(1-maphthoyl)phenyl]acetate, methylhydrazine and EtOH in a sealed tube at 150.degree. for 3 h, cooling to room temp., adding acetic acid, heating to X = NR4 and Y = CRERG' or X = CRERG' and Y = NR6; Z = 0, S. RI = (CI-C12) alkyl, (C3-C6) cycloalkyl, (C6-C18) aryl, (C6-C18)aryl(C1-C4)alkyl,

L62 ANSWER 4 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-33-1 CAPLUS
Carbanic acid, [2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME) EN CN

REFERENCE COUNT:

15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) (C1-C12) alky1(C6-C18) ary1, (C5-C18) heterocycle including 1-3 heteroatoms, or OR2, SR2 or NR2R3 in which (i) R2 and R3 = H, (C1-C6) alky1. (C3-C6) cycloalky1, (C6-C12) ary1, or (C5-C12) heterocycle including 1-3 heteroatoms or, (ii) R2 and R3 together forms a linear or branched hydrocarbon chain having 2-6 atoms of C, optionally including gloreq.1 double bonds and/or optionally interrupted by O. S or N. R4 and R4 = (C3-C6) cycloalky1, (C6-C18) unsubstituted ary1, (C6-C18) ary1(C1-C4) alky1, (C6-C18) ary1 (C5-C18) heterocycle including -3 heteroatoms, with provisos. R6 and R6' = H, (C1-C6) alky1, (C6-C18) ary1, (C6-C18) ary1, (C6-C18) ary1 (C1-C4) alky1, (C1-C12) alky1 (C6-C18) ary1, preferentially 7h, bensyl and (C1-C6) alky1, hensyl and R8 = H, (C1-C12) alky1 and a group on C82, with the condition that R7 and R8 = not both H, or R7 and R8 together form a linear or branched hydrocarbon chain having 2-6 C atoms, including optionally , gtoreq.1 double bonds and/or optionally interrupted together form a linear or branched hydrocarbon chain having 2-6 C atoms, including optionally , gtoreq.1 double bonds and/or optionally interrupted by O, S or N. Addnl. definitions of the variables in I are given in the C1 alky1-1, 4-bencodiazepin-3-yl) acetate R1: PAC (Pharmacological activity); RT (Reactant); STN (Synthetic preparation); RMCT (Reactant or reagent), USES (Uses) (Use) (drug candidate; preph. of bencodiazepinoses as cyclic nucleotide phosphodiesterase (particularly PDE4) inhibitors useful as antiinflammatories 477743-07-0 CARIUS H-1,4-Bencodiazepine-3-acetic acid, 1-ethy1-2,3-dihydro-7,8-dimethoxy-2-oxo-5-pheny1-, ethyl ester (9C1) (CA INDEX NAME)

Page 7

SOURCE:

Z ANSVER 6 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
DESSION NUMBER:
DOCHENT NUMBER:
138:378527
ITILE:
Relating the Structure, Activity, and Physical
Properties of Ultrashort-Acting Benzodiazepine
Receptor Agonists
Pacofsky, Gregory J.; Stafford, Jeffrey A.; Cox,
Richard F.; Cowan, Jill R.; Dorsey, George F.;
Gonzales, Stephen S.; Kaldor, Istvan Konzalka, George
V.; Lovell, George G.; McIntyre, Maggie S.; Tidvell,
Seffrey H.; Todd, Dan: Whitesell, Graham; Viard,
Robert P.; Feldman, Paul L.
GlaxosmithKline, Research Triangle Park, NC, 27709,
USA

Bioorganic & Medicinal Chemistry Letters (2002), 12(21), 3219-3222 CODEN: EMCLES; ISSN: 0960-894X Elsevier Science Ltd.

PUBLI SHER:

DOCUMENT TYPE: LANGUAGE:

THE Journal Regist Register Regi

308242-24-2p
RL: PAC (Pharmacological activity): PRP (Properties): RCT (Reactant): SFN (Synthetic preparation): REU (Therapeutic use): BIOL (Biological study): PREP (Preparation): RACT (Reactant or reagent): USES (Uses) (atructure-activity relationship and phys. properties of ultrashort-acting benzodiazepine receptor agonists)
308242-24-2 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dibydro-2-oxo-5-(2-pyridinyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-14-0

308242-14-0
RL: PAC (Pharmacological activity), PRP (Properties), RCT (Reactant), THU
(Therapeutic use); BIOL (Biological study), RACT (Reactant or reagent);
USSS (Uses)
(structure-activity relationship and phys. properties of
ultrashort-acting benzodiazepine receptor agonists)
308242-14-0 CAPLUS

L62 ANSWER 6 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-47-9 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-(ethylamino)-5-(2-fluorophenyl)-, methyl ester, (38)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-48-0 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2[(phenylmethyl)amino]-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-49-1 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[{4-pyridinylmethyl}amino}-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 6 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN H=-1,4-Benzodizzepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3dibydro-2-oxo-, methyl ester, (38)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-45-7P

308242-45-7P
RL: PAC (Pharmacological activity), PRP (Properties), SPN (Synthetic preparation), TRU (Therapeutic use), BIOL (Biological study), PREP (Preparation), USES (Uses) (structure-activity relationship and phys. properties of ultrashort-acting benzodiazepine receptor agonists) 308242-45-7 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-(methylamino)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-46-8P 308242-47-9P 308242-48-0P 308242-9-1P 308242-50-4P 308242-51-5P 308242-50-4P 308242-51-5P 308242-51-6P 308242-51-6P 308242-51-6P 308242-51-6P 308242-51-6P 308242-52-6P 308242-52-6P 308242-51-6P 308242-6P 308242-6P

Absolute stereochemistry.

L62 ANSWER 6 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-50-4 CAPLUS

3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-fluoropheny1}-2-[[2-(4-pyridiny1)ethy1]amino]-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-51-5 CAPLUS

3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-{(2-methylpropyl)amino]-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-52-6 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[[2-(HH-imidazol-4-yl)ethyl]amino]-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

L62 ANSVER 6 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-53-7 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[(2-hydroxyethyl)anino)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

308242-53-7DP, derivs. 308243-53-0DP, derivs.

RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(structure-activity relationship and phys. properties of ultrashort-acting benzodiazepine receptor agonists)
308242-53-7 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-{(2-hydroxyethyl)amino]-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OCCUPENT NUMBER:

ANSWER 7 OF 106

ESSION NUMBER:

WENT NUMBER:

138:362129

138:362129

10entification and Structure-Activity Studies of Novel

Ultrashort-Acting Benzodiazepine Receptor Agonists

Stafford, Jeffrey A.; Pacofsky, Gregory J.; Cox,

Richard F.; Covan, Jill R.; Dorsey, George F.;

Gonzales, Stephen S.; Jung, David K.; Koszalka, George

W.; Mcintyre, Maggle S.; Tidwell, Jeffrey H.; Wiard,

Robert P.; Feldman, Paul L.

GlaxoSmithKline, Research Triangle Park, NC, 27709,

USA

RCE:

Bioorganic & Medicinal Chemistry Letters (2002),

12(21), 3215-3218

CODEN: BNCLES; ISSN: 0960-894X

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Elsevier Science Ltd. AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

JISHER: Elsevier Science Ltd.

MENT TTPE: Journal

UNAGE: English

The synthesis and evaluation of novel ultrashort-acting benzodiazepine

(USA BZD) agonists is described. A BZD scaffold was modified by

incorporation of amino acids and derivs. The propionate side chain of

glutanic acid tethers an enzymically labile functionality where the

metabolite carboxylic acid displays markedly reduced BZD receptor

affinity. The USA BZDs were characterized by full agonism profiles.

308242-39-99 308242-00-29 524733-20-49

S24735-21-58 524735-22-69 524733-23-79

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); TRU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)

(identification and structure-activity studies of novel

ultrashort-acting benzodiazepine receptor agonists)

308242-39-9 CAPIUS

Glycine, N-[7-chloro-5-{2-chlorophenyl}-2,3-dihydro-2-oxo-1H-1,4
benzodiazepin-3-yl]-, methyl ester (9CI) (CA INDEX NAME)

beta.-Alanine, N-[7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-lH-1,4-benzodiazepin-3-yl]-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 6 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RN 308243-53-0 CAPLUS
CN 3H-14-Benzodisacepine-3-propanoic acid, 7-chloro-2-[(2-bydroxyethyl)anino]5-(2-pyridinyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 17

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

524735-20-4 CAPLUS Glycine, N-{(35)-7-chloro-5-{2-chlorophenyl}-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl}-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

524735-21-5 CAPLUS Glycine, N-[{3R}-7-chloro-5-{2-chlorophenyl}-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl}-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

524735-22-6 CAPLUS
.beta.-Alanine, N-[(3S)-7-chloro-5-(2-chloropheny1)-2,3-dibydro-2-oxo-1H-1,4-benzodiarepin-3-y1]-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

524735-23-7 CAPLUS
.beta.-Alanine, N-[(3R)-7-chloro-5-(2-chlorophenyl)-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-14-0P 308242-18-4P 308242-29-7P
308242-30-0P 308242-34-4P
RL: PAC (Pharmacological activity), SPN (Synthetic preparation), THU
(Therapeutic use), BIOL (Biological study), PREP (Preparation), USES
(Uses)
[identification and structure-activity studies of novel
ultrashort-acting benzodiazepine receptor agonists)
308242-14-0 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluoropheny1)-2,3-dibydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-34-4 CAPLUS
IR-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, 1-methylethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-15-1 308242-16-2 308242-17-3
308242-21-9 308242-26-4 308242-33-3
308242-21-9 308242-26-4 308242-33-3
308243-62-1 524735-10-2 524735-11-3
524735-13-4 524735-13-5 7 524735-16-6
524735-17-9 524735-18-0 524735-19-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
[identification and structure-activity studies of novel ultrashort-acting benzodiazepine receptor agonists)
308242-15-1 CAPLUS
18-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-16-2 CAPLUS Page 10

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

309242-18-4 CAPLUS
IR-1,4-Benzodiagepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-2-cxo-, phenylmethyl ester, (35)- (3Cl) (CA INNEX NAME)

Absolute stereochemistry.

308242-29-7 CAPLUS
1H-1,4-Bencodiazepine-3-propanoic acid, 7-chloro-5-{2-fluoropheny1}-2,3-dihydro-2-oxo-,4-pyridinylmethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-30-0 CAPLUS 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, butyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-brono-5-{2-fluorophenyl}-2,3dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-17-3 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-21-9 CAPLUS
1H-1,4-Benzodiazepine-3-butanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-26-4 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-7-nitro-2-oxo-, nethyl ester, (3S)- (9CI) (CA INDEX NAME)

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-33-3 CAPLUS lH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, ethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-62-1 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 5-{2-fluorophenyl}-2,3-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

524735-10-2 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-,
phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

524735-16-8 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluoropheny1)-2,3-dibydro-2-oxo-, phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

524735-17-9 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, phenylmethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

524735-18-0 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-7-nitro-2-oxo-5-phenyl-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

524735-11-3 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, phenylmethyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

524735-12-4 CAPLUS 524735-12-4 CAPUS IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, phenylmethyl ester, (3S)- {9CI} (CA INDEX NAME)

Absolute stereochemistry.

524735-15-7 CAPLUS 524(35-13-) CAPUS
HF-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, 4-pyridinylmethyl ester, (3S)- (9Cl) (CA INDEX NAME) Absolute stereochemistry.

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

524735-19-1 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-7-nitro-2-oxo-5-phenyl, phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

524735-13-5P 524735-14-6P 524/35-13-39 524735-14-69
RL: SPN (Synthetic preparation); PREP (Preparation)
[identification and structure-activity studies of novel
ultrashort-acting benzodiszepine receptor agonists)
524735-13-5 CAPUS
Glycine, N-(7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-1H-1,4benzodiazepin-3-yl)- (SCI) (CA INDEX NAME)

524735-14-6 CAPLUS
.beta.-Alanine, N-{7-chloro-5-{2-chlorophenyl}-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl}- (9CI) (CA INDEX NAME)

L62 ANSWER 7 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

REFERENCE COUNT:

20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT INVENTOR (S):

ANSYER 8 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
SION NUMBER: 2001:858430 CAPLUS
136:6019 Bencodiazepine derivatives as amyloid precursor protein modulators
Castro Pineiro, Jose Luis; Churcher, Ian; Guiblin, Alexander Richard; Harrison, Timothy; Kerrad, Sonia; Madin, Andrew Nadin, Alan John; Owens, Andrew Pate; Sparey, Timothy Jason; Teall, Martin Richard; Villams, Susannah
Herck Sharp & Dohne Limited, UK
CE: PCT Int. Appl., 165 pp.
CODEN: PIXXID

4ENT TYPE: Patent

PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE IE, SI, LT PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

L62 ANSWER 8 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

$$(R^5)_n \xrightarrow{\stackrel{N}{N}^1}_{A-B} \xrightarrow{\stackrel{N}{H}}_{H} \xrightarrow{\stackrel{N}{N}^2}_{R^2} \xrightarrow{R^4}_{I}$$

Benzodiazepines I (AB = (un)substituted C:N, 1,2,4-triazole-3,4-diyl, CONH, NHCO) X = 0, S, NN; RRI = CH:CH, CHICCH2: Y = (un)substituted alkylene; RI = H, (un)substituted alkyl, cycloalkyl, alkenyl, alkynyl; RZ = (un)substituted alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, OH, NHZ: R3 = H, alkyl; RR3 = alkylene; R4 = aryl, heteroaryl, alkyl; OH, NHZ: R3 = H, alkyl; RR3 = alkylene; R4 = aryl, heteroaryl, alkyl; OH, NHZ: R3 = H, alkyl; RR3 = alkylene; R4 = aryl, heteroaryl, alkyl; OH, alkyl; polyfluoroalkyl, OH, alkoxy; n = 0-3] were prepd. The compds. and hence find use in the treatment or prevention of conditions associated the processing of amyloid precursor protein by _qamma_secretase, and hence find use in the treatment or prevention of conditions associated with the deposition of _beta._amyloid, such as Altheimer's disease (no data). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata). Thus, the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata, with the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata, with the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata, with the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata, with the amide II was prepd. from tert._Bu !-methyl-2,5-dioxodata, with the amide II was

preprior asystems nonemators are presented as any total precessor protests and ulators)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9Cl) (CA INDEX NAME)

L62 ANSWER 8 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

168162-29-6 CAPLUS
Carbamic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSYER 9 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
SSION NUMBER: 2001:762977 CAPLUS
135:303916
E: Preparation of substituted lactams as inhibitors of
a.beta. protein production
NTOR(S): Han, Veis Liu, Hongs Olson, Richard E., Yang, Michael
G.

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE: DuPont Pharmaceuticals Company, USA PCT Int. Appl., 201 pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE:

English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

L62 ANSWER 9 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

365569-29-5P 365569-45-5P

Jabses-29-19 365569-43-59
REL: RCT (Reactant): SPM (Synthetic preparation): PREP (Preparation): PACT (Reactant or reagent) (intermediate; prepn. of benzodiazepinones as inhibitors of A.beta. prodn. for treatment of Alzheimer's disease and Down's syndrome)
36569-29-5 CAPIUS
Carbamic acid, [2,3-dihydro-5-(4-methyl-2-pyridinyl)-2-oxo-lH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

365569-45-5 CAPLUS Carbamic acid, [2,3-dihydro-2-oxo-5-[4-(trifluoromethyl)-2-pyridinyl]-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 9 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

The title compds. I [wherein Q = (CR7R7a)mR4, (CR7R7a)mSR4, (CR7R7a)mOR4, (CR7R7a)mOR4), (CR7R7a)mOR4, or composed when n = 0, then R4 noteq. H n = 1-3 n = 0-21 R4, R5, and z = independently H or (un)substituted alkyl, alkenyl, alkynyl, carbocycle, or aryl: R7 and R7a = independently H or alkyl; R7b = H or alkyl; ring B = (un)substituted are membered lactans W = a bond or (CR6Ra)app p = 0-4; R8 and R8a = independently H, F, (cyclo)alkyl, alkenyl, or alkynyl; X = a bond or (un)substituted aryl; carbocycle, or heterocycle; Y = a bond or (CR6Ra)app p = 0-4; R8 and R8a = independently H, F, or (cyclo)alkyl; V = a bond. CO, 0, S; SO, SO2, or (un)substituted arylin, carbocycle, or heterocycle; Y = a bond or (CR6Ra)app p = 0-4; R8 and R9a = independently H, F, or (cyclo)alkyl; V = a bond. CO, 0, S; SO, SO2, or (un)substituted amino, carbamoyl, carbocylanino, sulfannyl, aminosulfonyl, carboxyl, etc.] were prept. For example, coupling of (35)-3-mino-1,3-dibydro-1-mathyl-5-phenyl-2H-1,4-bencodiazepin-2-one with (18a)-1,4-bencodiazepin-2-one with (18a)-1,4-bencodiazepin-2-one with (18a)-1,4-bencodiazepin-2-one with blocarboxyldimidazele (711) and redn. with BuJSaH (851), gave II. I inhibit the processing of amyloid precursor protein and, more specifically, inhibit the prodn. of A.beta.-peptide, thereby acting to prevent the formation of neurol. deposits of amyloid protein (no data). Thus, I are useful for the treatment of Alebac-peptide, and Down's Syndrome (no data).

ME: PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); PRPP (Preparation); PROC (Process); RACT (Reactant) or treatment of Alzheimer's disease and Down's Syndrome) (School-3-1-9) 135569-31-9, 241-910.

365569-47-7 CAPLUS

Carbamic acid, [2,3-dihydro-1-methyl-2-oxo-5-[4-(trifluoromethyl)-2-pyridinyl]-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9C1) (C

ANSWER 10 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
2001:565016 CAPLUS
2001:565016 CAPLUS
135:137529
E: Preparation of azepine derivatives as VIA-4
antagonists
NTOR(S): Ikegami, Satoru; Inoguchi, Kiyoshi; Fukui, Hideto,
Sumita, Yuji; Maruyama, Tatauya; Watanuki, Hitsuru
Kaken Pharmaceutical Co., Ltd., Japan
FCT Int. Appl., 62 pp.
CODEN: PIXXD2
VAGE: Japanese

COESSION NUMBER: DOCUMENT NUMBER: TITLE:

INVENTOR(S):

PATENT ASSIGNEE (5): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | | | | | | | | |
|--|--|--|---|--|--|--|--|--|
| | | 802 WO 2001-JP5 | 20010126 | | | | | |
| W: AE, AG, CR, CU, HU, ID, LU, LV, SD, SE, YU, ZA, RW: GH, GM, DE, DK, BJ, CF, PRIORITY APPLN. INFO. | AL, AM, AT, CZ, DE, DK, IL, IN, IS, MA, MD, MG, ISG, SI, SK, 2W, AM, AZ, IKE, LS, MW, PES, FI, FR, CG, CI, CH, CE; | AU, AZ, BA, BB, BG, B DM, DZ, EE, ES, FI, G JP, KE, KG, KP, KR, K KK, MN, MW, MX, MZ, N SI, TJ, TM, TR, TT, T SY, KG, KZ, MD, RU, T SY, KG, KZ, MD, RU, T BB, GR, IE, IT, LU, M JP, 2000-20358 | R, BY, B2, CA, CH, CN, B, GD, GE, GH, GM, HR, CZ, LC, LK, LR, LS, LT, O, NZ, PL, PT, RO, RU, Z, UA, UG, US, UZ, VN, J, TM G, ZW, AT, BE, CH, CY, C, NL, PT, SE, TR, BF, E, SN, TD, TG | | | | | |
| OTHER SOURCE(S): | MARPAT 13 | 35:137529 | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. [I; R1 = H, alkyl, aryl; R2 = H, (CH3)3COCO; R3 = alkylene, divalent arom. hydrocarbon derivs.; R4 = H, alkyl; X = arom. hydrocarbon heterocycle; m = 1, 2, 3; Y = N, 0; Z = R3R7R6AI; A1 = CH2, SO2; R6 = alkylene, divalent arylalkane derivs.; R7 = CH2, CO; R8 = alkyl; arylalkyl] and salts are prepd. Title compds. or salts of title compds. are used as the active ingredient in remedies having peroral absorbability and exhibiting VIA-4 antagonism. Thus, the title compd. II was prepd. and biol. tested for VIA-4 antagonism.

35224-59-49
RL: BAC (Riological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (USE)
[SPED. of acepine derivs. as VIA-4 antagonists)

35224-59-44 CAPLUS

18-24-59-44 CAPLUS

18-24-59-45 (APLUS

1

(Continued) L62 ANSWER 10 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

352235-84-8F 352235-85-9F 352235-86-0F 352238-82-5F 392238-82-59
RL: SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of azepine derivs. as VLA-4 antagonists)
352235-84-88 CAPLUS
IH-1,4-Benzodiazepine-3-acetic acid, 1-{{3-}}
benzodipapylacetyl]anino|phenyl|nethyl]-7-chloro-2,3-dihydro-2-oxo-5-phenyl-, (35)- (9CI) (CA INDEX NAME)

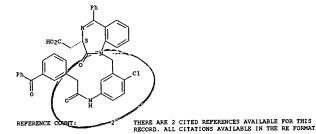
Absolute stereochemistry.

352235-86 - CAPLUS

1H-1,4-Benzodiazepine-3-acetic acid, 1-[{2-chloro-5-{{{4-[{{2-methylopenyl} amino]phenyl} acito}, 2-,3-dihydro-2-oxo-5-phenyl-, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 10 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L62 ANSWER 10 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

352235-8 0 CAPLUS

IH-1, 4-Benbedia: emines-3-acetic acid, 2,3-dihydro-1-[{2-methoxy-5-[[4-[[(2-methoxy-5-[[4-[[(2-methoxy-5-phenyl]amino]phenyl]amino]phenyl]methyl]-2-axo-5-phenyl-, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

L62 ANSWER 11 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:115129 CAPLUS
DOCUMENT NUMBER: 134:163068
Preparation of novel 1,4-benzodiazepines as modulators of metabotropic glutamate receptors
Curry, Kenneth Pajouhesh, Hossien
HOT Pharma Inc., Can.
PCT Int. Appl. 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: PIXXD2
FAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE

WO 2001010846 A2 20010215 WO 2000-CA897 20000804

WO 2001010846 A3 20011108

W: AR, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CN, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, HA, HD, MG, MK, MN, MW, MX, MZ, NO, NZ, FL, FT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CT, CG, CI, CH, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1210338 A2 20020605 EP 2000-951157 20000804

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003506440 T2 20030218 JP 2001-515312 20000804

PRIORITY APPIN. INFO.: CA 2000-CA897 W 20000804

HARPAT 134:163068

The title compds. [I; Rl-R9 = H, NO2, NH2, etc.; R10 = alkyl, aryl, arylalkyl, etc.; R31 = H, or taken together with R32 to form carboxy-substituted spirocycle; R32 = carboxy-substituted Ph, carboxy-substituted Ph, carboxy-substituted Cyclopropyl, CH2COZH, etc.; R31 or/and R32 contain at least COZH, or NH2 or both] which act as modulators of metabotropic glutamate receptors and, as such, are useful in treating diseases of the

ANSWER 11 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) central nervous system related to the metabotropic glutamate receptor system, were preped. E.g., a multi-step synthesis of I [R1, R2, R4-R10 = H; R3 = C1; R31 = H; R22 = CHZOCH] was given. Biol. data for the exemplified compds. I was presented. 29550-47-09 32570-12-09
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of novel 1,4-bencodiazepines as modulators of netabotropic glutamate receptors)

phenaste receptors)
29580-47-0 CAPIUS
1H-1.4-Bencodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl- (9CI) (CA INDEX NAME)

325787-12-0 CAPLUS

1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-(9CI) (CA INDEX NAME)

IT

325787-16-4F 325787-17-5P
RL: RCT (Reactant): SFN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent)
(prepn. of novel 1,4-benzodiazepines as modulators of metabotropic glutanate receptors)
325787-16-4 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSYER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:824235 CAPLUS
134:4954 Preparation of short-acting benzodiazepines
INVENTOR(S): Feldman, Paul L.; Jung, David Kendall; Kaldor, Istvan, Pacensky, Gregory J.; Stafford, Jeffrey A.; Tidwell, Jeffrey H.
Olaws Group Limited, UK
POLUMENT TYPE: Patent L.; Appl., 99 pp.
COEMS: PIXXD2
DOCUMENT TYPE: Patent English
FAMILY ACC. NUM. COUNT: 1
English
FAMILY ACC. NUM. COUNT: 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 2 20021224 JF 2000-618253 20000512 GB 1999-11152 A2 19990514 WO 2000-US13134 W 20000512 MARPAT 134:4954 OTHER SOURCE(S):

11

Title compds. [I: R = KnYmCOZRI: RI = H, alkyl. (hetero)aryl(alkyl), etc.; R2 = (2-halo)phenyl or 2-pyridyl; R3 = H, halo, CF3, NO2: R4 = H or (dialkylamino)alkyl and R56 = O or S; R4RS = bond and R5 = (un)substituted amino; R5R6 = N or CH linked to R4 wherein R4 = CR8:U; U = N or CR9; R7 = H or alkyl: R8; R9 = H or (hydroxy)alkyl: X = CH2, NH, NMe: Y = O or CH2: n = 1 or 2; n = 0 or I] and N-oxides thereof were prepd. Thus, 2-amino-5-chloro-2'-fluorobenzophenone was amidated by (S)-ClOCM(RHFmoc)(EMZHZCOZMe (breps. given) and the product cyclized to give title compd. II. Data for biol. activity of I were given.

L62 ANSWER 11 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

325787-17-5 HR-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, methyl ester (9CI) (CA INDEX NAME)

ANSVER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS ON STN 308242-14-0P 308242-15-1P 308242-16-2P 308242-15-1P 308242-15-5P 308242-20-9 308242-15-4P 308242-22-0P 308242-23-4P 308242-22-0P 308242-23-4P 308242-23-4P 308242-23-4P 308242-23-4P 308242-23-4P 308242-23-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-4P 308242-33-5P 308242-33-4P 308242-34-5P 308242-33-4P 308242-34-4P 308242-33-4P 308242-34-4P 308242-33-4P 308242-34-4P 308242-33-4P 308242-34-4P 308242-33-4P 308242-3 (Continued) 308243-19-8P 308243-20-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of short-acting benzodiazepines)
308242-14-0 CAPLUS dihydro-2-oxo-, methyl ester, (3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-15-1 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (35)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-16-2 CAPLUS
CN HH-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, methyl ester, (35)- (9CI) (CA INDEX RAME)

Absolute stereochemistry.

RN 308242-17-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-cbloro-5-(2-fluorophenyl)-2,3-dihydro-2-cwo-, nethyl ester, (3R)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-18-4 CAPLUS
CN HR-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-Z-oxo-, phenylmethyl ester, (38)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-22-0 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-23-1 CAPLUS CN HH-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-2,3-dihydro-2-oxo-5-(2pyridinyl)-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-24-2 CAPLUS
CM 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridiny)1-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-19-5 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dibydro-2-oxo-, phenylmethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-20-8 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 308242-21-9 CAPLUS
CN 1H-1,4-Benzodiazepine-3-butanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-25-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-butanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-cxo-1,1-dimethylethyl ester, (35)- (9C1) (CA INDEX NAME)

Absolute stereochemistru

RN 308242-26-4 CAPLUS
CN IH-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-7-nitro-2-zoxo-, methyl ester, (3S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-27-5 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, propyl ester, (3S)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

EN 308242-28-6 CAPLUS

1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dibydro-2-oxo-5-{2-pyridinyl}-, ethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

RN 308242-29-7 CAPLUS
CN IH-1,4-Benzodiazepine-3-propagoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, 4-pyridinylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-30-0 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, butyl ester, (35)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued Absolute stereochemistry.

RN 308242-34-4 CAPLUS CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, 1-methylethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-35-5 CAPLUS
CN IH-1, 4-Benzodiazepine-3-propanoic acid, 7-chloro-1-[2-(diethylanino)ethyl]-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-36-6 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-1-methyl-2-oxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Page 17

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
Absolute stereochemistry.

RN 308242-31-1 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, butyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-32-2 CAPLUS

1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, 2-methylpropyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-33-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, ethyl ester, (35)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-37-7 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-1-methyl-2-oxo-, phenylmethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-38-8 CAPLUS
CN 1H-1,4-Benzodizzepine-3-propanoic acid, 7-chloro-1-[2-(diethylamino)ethyl]-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-39-9 CAPLUS
CN Glycine, N-[7-chloro-5-(2-chlorophenyl)-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, methyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-40-2 CAPLUS
.beta.-Alanine, N-{7-chloro-5-{2-chlorophenyl}-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl}-, nethyl ester {9Cl} (CA INDEX NAME)

308242-41-3 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-thioxo-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-42-4 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-thioxo-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-46-8 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-(methylamino)-5-(2-pyridinyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-47-9 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-(ethylamino)-5-(2-fluorophenyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

308242-48-0 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[(phenylmethyl)amino]-, methyl ester, (35)- {9CI} (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-43-5 CAPLUS
IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dibydro-5-(2-pyridinyl)-2-thioxo-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-44-6 CAPLUS IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-fluorophenyl}-2,3-dibydro-2-oxo-, methyl ester, 4-oxide, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-45-7 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-fluorophenyl}-2(methylamino)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308242-49-1 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[(4-pyridinylmethyl)amino]-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-50-4 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluoropheny1)-2-({2-(4-pyridiny1)ethy1)amino)-, methy1 ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308242-51-5 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-fluorophenyl}-2-[{2-methylpropyl}amino}-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued

RN 308242-52-6 CAPLUS CN 3R-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[{2-(H-inidazol-4-yl)ethyl]anino]-, nethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-53-7 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-fluorophenyl}-2-{{2-hydroxyethyl}amino}-, methyl ester, (35)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

RN 308242-54-8 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-5-(2-fluoropheny1)-2(methylamino)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-76-4 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 308242-77-5 CAPLUS
CN IH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 308242-78-6 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

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L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) Absolute stereochemistry.

RN 308242-73-1 CAPLUS CN 1H-1,4-Benzediazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, nethyl ester (9CI) (CA INDEX NAME)

RN 308242-74-2 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, nethyl ester (9CI) (CA INDEX NAME)

RN 308242-75-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-79-7 CAPLUS
CN 1H-1,4-Benzodiazepine-3-butanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 308242-80-0 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 308242-81-1 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 308242-82-2 CAPLUS
CN IH-1,4-Benzodizzepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

EN 308242-83-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-butanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 308242-84-4 CAPLUS
CN IH-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-7nitro-2-oxo-, nethyl ester (SCI) (CA INDEX NAME)

RN 308242-85-5 CAPLUS
CN IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, propyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-89-9 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, butyl ester (9CI) (CA INDEX NAME)

RN 308242-90-2 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-(2-pyridinyl)-, 2-methylpropyl ester (9Ci) (CA INDEX NAME)

RN 308242-91-3 CAPLUS
CN HH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, etbyl ester (9Cl) (CA INDEX NAME)

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162 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

EN 308242-86-6 CAPLUS
CN 1H-1,4-Senzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-2-oxo-5-{2-pyridinyl}-, ethyl ester (9CI) (CA INDEX NAME)

RN 308242-87-7 CAPLUS
CN IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, 4-pyridinylmethyl ester (9Cl) (CA INDEX NAME)

RN 308242-88-8 CAPLUS CN IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-cace, butyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-92-4 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 308242-93-5 CAPLUS
CM H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-1-{2-(diethylamino)ethyl}-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester (9Cl) (CA INDEX NAME)

RN 308242-94-6 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 308242-95-7 CAPLUS
CN HH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-1-achtyl-2-oxo-, phenylasthyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

EN 308242-96-8 CAPLUS
CN IH-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-1-[2-(diethylamino)ethyll-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 308242-97-9 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 308242-98-0 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-chloropheny1}-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308243-02-9 CAPLUS
CN IH-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-2oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-03-0 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-7-nitro-2-oxo-5-(2-pyridiny1)-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-04-1 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dibydro-7-nitro-2-oxo-5-{2-pyridinyl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 308243-05-2 CAPLUS

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L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308242-99-1 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-5-(2-pyridinyl)-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-00-7 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, methyl ester, 4-oxide (9CI) (CA INDEX NAME)

RN 308243-01-8 CAPLUS
CN HH-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-7-nitro-2-oxo-5-phenyl-, phenylaethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 308243-06-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-7-nitro-2-oxo-5-phenyl, methyl ester (9C1) (CA INDEX NAME)

RN 308243-07-4 CAPLUS
CN .beta.-Alanine, N-[7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, butyl ester (9CI) (CA INDEX NAME)

RN 308243-08-5 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluoropheny1)-2,3-dihydro-2-oxo-, 3-pyridinylmethyl ester (9CI) (CA INDEX NAME)

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L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308243-09-6 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, 4-pyridinylmethyl ester (9CI) (CA INDEX NAME)

RN 308243-10-9 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2(methylamino)-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-11-0 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-(methylamino)-5-(2-pyridinyl)-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308243-15-4 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluoropheny1)-2-[[2-(4-pyridiny1)ethy1]amino]-, methy1 ester (9CI) (CA INDEX NAME)

RN 308243-16-5 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-{2-fluoropheny1}-2-{{2-methylpropy1}amino}-, methyl ester (9CI) (CA INDEX NAME)

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RN 308243-17-6 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[[2-(1H-imidazol-4-yl)ethyl]anino]-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308243-12-1 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-(ethylamino)-5-(2-fluorophenyl)-, methyl ester (9CI) (CA INDEX NAME)

EN 308243-13-2 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2{(phenylmethyl)anino}-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-14-3 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-{(4-pyridinylmethyl)amino]-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 308243-18-7 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[(2-hydroxyethyl)amino]-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-19-8 CAPLUS
CN 3H-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-5-(2-fluorophenyl)-2(methylamino)-, methyl ester (9CI) (CA INDEX NAME)

RN 308243-20-1 CAPLUS
CN 3H-1,4-Benzodiszepine-3-propanoic acid, 7-chloro-5-(2-chlorophenyl)-2(methylamino)-, methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308243-62-1
RL: RCT (Reactant), RACT (Reactant or reagent)
(prepn. of short-acting benzodiazepines)
308243-62-1 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, nethyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-44-9P 308243-45-0P 308243-46-1P
308243-67-2P 308243-68-3P 308243-99-6P
308243-50-7P 308243-51-8P 308243-52-9P
308243-53-0P 308243-53-6P 308243-55-2P
308243-57-4P 308243-59-6P 308243-60-9P
308243-57-4P 308243-59-6P 308243-70-1P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (prepn. of short-acting benzodiazepines)
308243-44-9C APLUS
3H-1.4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-{(2-hydroxypropyl)anino]-, methyl ester, (3S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) dihydroxypropyl)amino]-5-(2-fluorophenyl)-, methyl ester, (3S)-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

308243-48-3 CAPLUS 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[(2-hydroxypropy1)amino]-5-(2-pyridiny1)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-49-4 CAPLUS 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[(2-hydroxy-1-methylethyl)amino)-5-(2-pyridinyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS OR STN (Continued)

308243-45-0 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-{(2-hydroxy-1-mathylethyl)amino}-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

308243-46-1 CAPLUS 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-{{2-hydroxy-1-(hydroxynethyl)ethyl}anino}-, methyl ester, (3S)- (9Cl) (CA INDEX NAME)

308243-47-2 CAPLUS 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[(2,3-

ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 308243-50-7 CAPLUS 3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-5-(2-pyridinyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-51-8 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[{2,3-dihydroxypropyl)amino]-5-{2-pyridinyl}-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

308243-52-9 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[(2-hydroxy-1-methylpropyl)amino]-5-(2-pyridinyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308243-53-0 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[(2-bydroxyethyl)anino]-5-(2-pyridinyl)-, nethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-54-1 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-bromo-2-[(2-hydroxypropy1)amino]-5-(2-pyridiny1)-, nethyl ester, (3S)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

308243-55-2 CAPLUS
1H-1,4-Benrodiazepine-3-propanoic acid, 7-chloro-5-{2-fluoropheny1}-2,3-dibydro-2-oxo-, (35)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308243-64-3 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[[3-[[{1,1-dimethylethyl]dimethylsilyl]oxy]-2-hydroxypropyl]amino}-5-(2-fluorophenyl)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-67-6 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-{{3-[[(1,1-dimethylidimethylidin

Absolute stereochemistry.

308243-70-1 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2-[[2-(1,1-dimethylethoxy)-1-(hydroxymethyl)ethyl]amino)-5-(2-fluorophenyl)-, methyl ester, (35)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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162 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

308243-57-4 CAPLUS

H-1,4-Benzodizepine-3-propanoic acid, 7-bromo-2-[[(dihydro-ZH-1,3-oxazin-3(HJ-VH)-4-morpholinylphosphinyl]cxy]-5-(2-fluorophenyl)-, methyl ester,

[35] (9CI) (CA INDEX RAME)

Absolute stereochemistry.

308243-59-6 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-fluorophenyl)-2-[{1-(hydroxymethyl)-2-[{tris(1-methylethyl)silyl}oxy]ethyl]amino]-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

308243-60-9 CAPLUS
3H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-5-(2-chlorophenyi)-2(methylthio)-, methyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 12 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

62 ANSWER 13 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
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PREPARATION Of Pripagation o Preparation of tripeptoid analogs as serine protease Freparation of tripeptoid analogs as serime protease inhibitors
Gyorkos, Albert C.; Spruce, Lyle W.
Cortech, Inc., USA
U.S., 107 pp., Cont-in-part of U. S. Ser. No. 761,190.
CODEN: USXXAM
Patent INVENTOR (5): PATENT ASSIGNEE (5): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 18

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CN 1247542 A 20000315
JF 2001192398 A2 20010717 JP 2000-197432 19971205
JF 2001192398 A2 20010717 JP 2000-197432 19971205
US 6001813 A 19991204 US 1998-69823 19980640
US 90052734 A 100000315 US 1998-69823 19990604
WX 9905240 A 200000315
PRIORITY APPLN. INFO::

US 6180334 A 20000515 US 1996-69155 A1 199906014
US 1996-691575 A1 199906015 JP 1998-522656

JP 2000-197432
US 1998-69823
US 1998-69823
US 1998-90046
NO 1999-2734
KX 1999-5240
US 1994-761190
A US 1996-761190
A US 1996-761916
A US 1996-76016
A US 1996-76016
A US 1996-761313
A US 1996-761313
A US 1996-761314
A US 1997-98281
A US 1997-98281
A US 1997-98281
A US 1997-982801
A US 1997-982801
A US 1997-98298
A US 1998-525656
A US 1998-52688
A US 1998-52888
A US 1998-528888
A U 32 19971205
32 19971205
31 19930430
31 19930604
32 1994121
32 19941204
32 19941204
34 19961206
44 19961206
45 19961206
46 19961206
47 19971204
47 19971204
47 19971204
47 19971204
47 19971205
48 19971205 WO 1997-US21636

L62 ANSWER 13 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

L62 ANSWER 13 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN OTHER SOURCE(S): MARPAT 134:5159 (Continued)

Tripeptides I (X, Y = 0, N, or S, provided that at least one of X or Y = N; R1 = (un)substituted (C5-12)aryl, (C5-12)arylalkyl, (C5-12)arylalkeyl, fused (C5-12)aryl-cycloalkyl, alkyl- or alkenyl-fused (C5-12)arylalkenyl, fused (C5-12)aryl-cycloalkyl, alkyl- or alkenyl-fused (C5-12)arylalkenyl, cycloalkyl optionally comprising one or more heteroatcas selected from N, S, or non-peroxide O; R2, R3 = H or alkyl: A = C0, NHCO, SO2, O2C, or CH2; M = H, alkyl, alkenyl, cycloalkyl, aryl, or arylalkyl (with provisos)] were prepd. as serine protease inhibitors, including inhibitors of human neutrophil elastase. Thus, peptide I (Cbz = benzyloxycarbonyl) (CE-2072) was prepd. and showed Ki = 0.025 nM for inhibition of elastase. 208846-82-2, CE 2230. SPN (Synthetic preparation); FBU (Therapeutic use); BIOL (Biological study), PREP (Preparation), USES (Uses) (prepn. of tripeptoid analogs as serine protease inhibitors) 201846-88-2 CAPUS

Carbanic acid, [7-chloro-5-{2-chlorophenyl}-2,3-dihydro-1-{2-[2-methyl-1-[[5-[(3-methyl)penyl)methyl]-1,3,4-oxadiazo1-2-yl]carbonyl]propyl]maino]-2-oxoethyl]-2-oxo-lH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

HR 2001-742 20011012
NO 2001-5065 20011018
US 2002-122559 20020415
US 1999-130370P P 19990421
US 2000-548091 A3 20000412
VO 2000-EP3394 V 20000414
250

OTHER SOURCE(5): MARPAT 133:335250

Pyrazolobenzodiazepines I [R1 = H, NO2, CN, halo, etc.; R2, R4 = H, halo, NO2, CF3, alkyl; R3 = H, cycloalkyl, aryl, etc.], cyclin-dependent kinase

REFERENCE COUNT:

L62 ANSWER 14 OF 106 CAPLUS COPYRIGHT 2003 ACS on STM (Continued) (CDXs, in particular CDX2) inhibitors, were prepd. E.g., 5-(2-chiorophenyl)-7-nitropyrarolo(3,4)[1,4]benzodiazepine-3-carboxaldehyde was prepd. I are anti-proliferative agents useful in the breast, colon, lung and prostate tumors.

II 303197-23-1P

303197-23-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent)
(prepn. of pyrazolobenzodiazepines as CDK2 inhibitors)
303197-23-1 CAPLUS
IH-1,4-Benzodiazepine-3-acetic acid, 5-(2-chlorophenyl)-2,3-dihydro-alpha.-hydroxy-7-nitro-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 15 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

ANSVER 15 07 106 CAPLUS COPYRIGHT 2003 ACS on STN
25510N NUMBER: 2000:456838 CAPLUS
133:89552
Succincylaminobenzodiazepines as inhibitors of A.beta. protein production
Olson, Richard E.
Du Pont Pharmaceuticals Company, USA
PCT Int. Appl., 256 pp.
CODEN: PIXXD2 INVENTOR (S): PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE 12 20030812 JP 2000-590572 1991223 12 20010615 NO 2001-2984 20010615 US 1998-113588P P 19981224 WO 1999-US30815 W 19991223 MARFAT 133:89552 OTHER SOURCE(S):

ANSVER 16 OF 106 CAPLUS COPYRIGHT 2003 ACS OD STN
ESSION NUMBER: 2000:175798 CAPLUS
WENT NUMBER: 132:222556 132:222556
Preparation of benrodiazepine derivatives as c-Src
tyrosine kinase SH2 ligands
Deprez, Piere Lesuisse, Dominique; Mandine, Eliane
Hoechat Marion Roussel, Fr.
PCT Int. Appl., 73 pp.
CODEM: PIXNO2 INVENTOR(S) PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: French FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE W0 2000014073 A1 20000316 W0 1999-FR2124 19990907
W: JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
FR 2782997 A1 20000310 FR 1998-11194 19980908
PRIORITY APPIN. INFO:
FR 1998-11194 19980908
OTHER SOURCE(S): MARPAT 132:222555 .. 20000310 FR 1998-11194 FR 1998-11194 MARPAT 132:222556

Title compds. (I: R = NHCOZR3; Rl = H, (ar)alkyl, aryl(alkyl)carbanoylnethyl, etc.; R2 = H, NHRD, COZRD, NHCOZRD, etc.; Rb = H, alk(en)yl, aryl(alkyl), etc.; R3 = P(0) (ORd) (ORe), OP(0) (ORd) (ORe), B(ORd) (ORe), etc.; Rb, Rd, Re = H, alk(en)yl, aryl, etc.; R3 = P(0) (ORd) (ORe), B(ORd) (ORe), etc.; Rb, Rd, Re = H, alk(en)yl, aryl, etc.; Z = CHR4Zl or (CHZ)nZl; R4 = H, (acyl)anino, tetrazolyl, etc.; Z1 = arylene or heterocyclylene; n = 0-2! were prepd. Thus, I (R = NHCOZCHZPh, Rl = RZ = H) was N-alkylated by BrCHZCOZET and the sapond product and dated by 4-(HZN) CGH4OPh to give, after N-deprotection, I (R = NHZ, Rl = CHZCONHCGH4(OP) to give, after and dated by HOZCCH (NHZCOZCH4) (OR) (OCH2Ph) 2! - 4 to give, after O-deprotection, I (R = NHCOCH (NHCOZCH43) CHZCGH4(OP) (O) (OCHZPh) 2!-4, Rl = (NHCOCH (NHCOZCH43) CHZCGH4(OP) (O) (OCHZPh) 2!-4, Rl = 108895-98-3

108895-98-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of benzodiazepine derivs. as c-Src tyrosine kinase SH2 ligands)
108895-98-3 CAPLUS
Carbamic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 16 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

119487-58-0P 172968-04-6P 260971-70-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of benzodiazepine derivs. as c-Src tyrosine kinase SH2 ligands)
119487-58-0 CAPLUS
LH-1.4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3[[(phenylmethoxy)carbonyl]amino]-, ethyl ester {9CI} (CA INDEX NAME)

172968-04-6 CAPLUS
IH-1, 4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3[[(phenylnethoxy)carbonyl]anino]- (9CI) (CA INDEX NAME)

260971-70-8 CAPLUS Carbamic acid, {2,3-dibydro-2-oxo-1-{2-oxo-2-{4-phenoxyphenyl}amino|ethyl}-5-phenyl-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

162 ANSWER 16 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

62 ANSWER 17 OF 106 CAPLUS COPYRIGHT 2003 ACS ON STN ACCESSION NUMBER: 2000:47017 CAPLUS COPYRIGHT 2003 ACS ON STN 2000:47017 CAPLUS 132:78559 132:78559
Preparation of heterocyclic compounds as serine protease inhibitors
Gyorkos, Albert: Spruce, Lyle W.
Cortech Inc., USA
U.S., 107 pp., Cont.-in-part of U.S. 5,891,852.
CODEN: USDOAM INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 18

PATENT NO. KIND DATE APPLICATION NO. DATE JP 1998-525656

JP 2000-197432
US 1998-69823
NO 1999-2734
US 1996-3240
US 1996-762381
A US 1996-762381
A US 1996-760916
A US 1996-76190
A US 1996-771317
A US 1996-771317
A US 1997-984884
A US 1997-984884
A US 1997-985296
A US 1997-985296
A US 1997-985201
A US 1 ió 19971205
32 19971205
32 19971205
3 19980430
19990604
A2 1994121
A2 1994121
A2 19961206
A1 19961206
A 19961206
A 19961206
A 199712004
A 199712004
A 199712004
A 199712004
A 199712005
V 19971205

OTHER SOURCE(S): WO 1997-US21636 MARPAT 132:78559

L62 ANSWER 17 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

The present invention relates to a series of compds. of general structure I [X, Y = 0, N, or 5 provided that at least one of X or Y = N, Rl = C5-12 aryla|kyl, or C5-12 aryla|kyl, or C5-12 aryla|kyl) with at least one N, S, and O, R2, R3 = H or a|kyl, B = S(0)2 or C(0) R6 = heterocycles (generic structures given) | that are useful as serine protease inhibitors, including inhibitors for human neutrophil elastase. In an in vitro test for inhibition of elastase, the title compd. II shows the Ki value of 78.3. Compds. of the invention are useful in treating conditions such as adult respiratory distress syndrome, septic shock, and multiple organ failure.

adult respiratory distress syndrome, septic shock, and multiple organical lure.

253072-91-27 253072-92-39 253072-93-49

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of heterocyclic compds. as serine protease inhibitors)

253072-91-2 CAPUS

Carbamic acid, [2,3-dihydro-1-[[[(15)-2-methyl-1-[[5-{[3-methyl]phenyl]methyl]-1,3,4-oxadiazol-2-yl]carbomyl]propyl]maino]carbomyl]
2-oxo-5-phonyl-HH-1,4-benzodiazepin-3-yl]-, SH-fluoren-9-ylmethyl ester

(SCI) (CA INDEX NAME)

L62 ANSWER 17 OF 106 CAPLUS GET 2003 ACS ON STN

253872-92-3 CAPLUS
Carbanic acid, [2,3-dihydro-1-[[[(1S)-1-[hydroxy[5-[(3-methylpheny]) nethyl)-1,3,4-oxadiazol-2-yl]nethyl]-2nethylpropyl)anino[carboxyl]-2-coxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-,
SH-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

253872-93-4 CAPLUS
Carbamic acid, (1-acetyl-2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 17 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 18 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

1999:819353 CAPLUS

132:64534

TITLE: 1999:819353 CAPLUS

132:64534

Preparation of cyclic amino acid compounds for inhibiting beta.-amyloid peptide release and/or its synthesis

INVENTOR(S): Thompson, Richard C., Wilkie, Stephen, Stack, Douglas R., Vanmeter, Eldon E., Shi, Qingh Britton, Thomas C., Audia, James E.; Reel, Jon K., Mabry, Thomas C., Audia, James E.; Reel, Jon K., Mabry, Thomas C., Audia, Stacey L., Stucky, Russell D., Porter, Warren J.

PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA, Eli Lilly & Company,

Elan Pharmaceuticals, Inc., USA; Eli Lilly & Company; SOURCE:

et al.
PCT Int. Appl., 714 pp.
CODEN: PIXXD2
Patent DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 4

JP 2002518493 T2 20020625 JP 2000-555875 19990622

PRIORITY APPIN. INFO:

US 1999-US14193 V 19990622

OTHER SOURCE(S):

AB Cyclic compds., e.g., RIRIS'NC(0)RNIS(Y)a(CR) PC(X)V (RI = (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, or cycloalkenyl, aryl, heterocyclyl, heterocyclyl, Ri5 = H, alkyl, substituted alkyl, aryl, heterocyclyl, heterocyclyl, which are optionally fused to form a bir or cycloalkenyl, heterocyclyl, which are optionally fused to form a bir or multi-fused ring systems; X = oxo, thioxo, hydroxyl, thiol, or hydro alkynyl, cycloalkyl, aryl, heterocyclyl, heterocyclyl, heterocyclyl, betteroxyl, heterocyclyl, heteroxyl, heteroxylyl, cycloalkyl, aryl, heteroxyl, heteroxylyl, pc = 0 or 1], vere prepd. for inhibition of .beta.-anyloid peptide release and/or its synthesis. Thus, (5)-3-(IN-21-hip)-heteroxylyl).—Lealaninyl aninoj-2,-3-dihydro-1-methyl-5-phenyl-IH-1,4-benzodiazepin-2-one was prepd. via cylation of (5)-3-(L-alaniylamino)-2,-3-dihydro-1-methyl-5-phenyl-IH-1,4-benzodiazepin-2-one was prepd. via cylation of (5)-3-(L-alaniylamino)-2,-3-dihydro-1-methyl-5-phenyl-IH-1,4-benzodiazepin-2-one was prepd. via cylation of (5)-3-(L-alaniylamino)-2,-3-dihydro-1-methyl-5-phenyl-IH-1,4-benzodiazepin-2-one was prepd. via compared to the control.

To 108995-28-3 155452-87-2 209985-22-8

L62 ANSWER 18 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
R1: RCT (Reactant), RACT (Reactant or reagent)
(preps. of cyclic amino acid compds. for inhibiting .beta.-amyloid
peptide release)
RN 10895-93 CAPLUS
CN Carbasie - 3 CAPLUS
CN Carbasie - 3 CAPLUS
CN (Carbasie - 4 CAPLUS CAPLUS NAME)

37

155452-87-2 CAPLUS
Carbamic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

66

209985-22-8 CAPLUS 2039a5-22-8 CAPLUS Carbamic acid, [7-bromo-5-{2-fluorophenyl}-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Ph-CH2-0-C

209985-28-4 CAPLUS
Carbanic acid, [7-chloro-5-{2-chlorophenyl}-2,3-dibydro-2-oxo-lH-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (SCI) (CA INDEX NAME)

162 ANSWER 18 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

Ph-CH2-0-C-NH

209985-17-1P 209985-20-6P 209985-25-1P
209985-32-0P 209985-33-1P 209986-63-0P
209986-66-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of cyclic amino acid compds. for inhibiting .beta.-amyloid peptide release)
209985-17-1 CAPUS
Carbanic acid. (7-chloro-2.3-dibwdro-1-methyl-2-ove-5-phemyl-14-14.

209909-17-1 CAPUDS Carbanic acid, (7-chloro-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-20-6 CAPLUS Carbamic acid, [7-bromo-5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS
Carbamic acid, [7-chloro-5-{2-chlorophenyl}-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl}-, phenylmethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 18 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209986-66-3 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-5-phenyl-1-(4,4,4-trifluorobutyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L62 ANSWER 18 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

₽b-0H2-0-C-

209985-32-0 CAPLUS
Carbanic acid, (2,3-dibydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-33-1 CAPLUS
Carbanic acid, (2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME) RN CN

209986-63-0 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-1-{2-oxo-2-phenylethyl}-5-phenyl-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME) 209986-63-0

LOS ANSWER 19 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 1999:819352 CAPLUS CAPLUS 132:64533

INVENTOR (S):

CAPLUS
132:64533
Preparation of cyclic amino acid compounds for inhibiting .beta.-amyloid peptide release and/or its synthesis
Audia, James E.; Thompson, Richard C.; Wilkie, Stephen C.; Britton, Thomas C.; Porter, Warren J.; Huffman, George W.; Latiner, Lee H.
Elan Pharmaceuticals, Inc., USA; Eli Lilly & Company PCT Int. Appl., 271 pp.
CODEN: PIXXD2
Patent
English PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE: Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

R: AT, BE, CH, DE, DK, ES, FR, GB, GB, IT, LI, U, NI, SE, MC, PT, IE, FI

IE, FI

JP 2002519482 T2 20020625 JP 2000-555874 19990621
US 6509331 B1 20030121 US 1999-337484 19990621
US 1999-102728 A2 19980622
US 1998-102728 A2 19980622
US 1 OTHER SOURCE(S): AB Compds. R1(

L62 ANSWER 19 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RN 108895-98-3 CAPLUS
CN Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylaethyl ester (9C1) (CA INDEX NAME)

155452-87-2 CAPLUS
Carbanic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-22-8 CAPLUS Carbanic acid, [7-bromo-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-28-4 CAPLUS
Carbamic acid, [7-chloro-5-{2-chlorophenyl}-2, 3-dihydro-2-oxo-lH-1, 4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

29

L62 ANSWER 19 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-32-0 CAPLUS
Carbamic acid, (2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

209985-33-1 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209986-63-0 CAPLUS
Carbamic acid, [2,3-dihydro-2-oxo-1-(2-oxo-2-phenylethyl)-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

Page 30

L62 ANSWER 19 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

IT

209985-17-1P 209985-20-6P 209985-25-1P
209985-32-0P 209985-33-1P 209986-63-0P
209985-66-3P
RL: RCT (Reactant); SPN (Synthetic preparation); FREP (Preparation); RACT (Reactant or reagent) (prepn. of cyclic amino acid compds. for inhibiting .beta.-amyloid peptide release)
209985-17-1 CAPLUS
Carbanic acid, (7-chloro-2, 3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

209985-20-6 CAPLUS
Carbanic acid, [7-bromo-5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS
Carbamic acid, [7-chloro-5-(2-chlorophenyl)-2, 3-dihydro-1-methyl-2-oxo-lH1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 19 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RN 209986-66-3 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-5-phenyl-1-(4,4,4-trifluorobutyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9C1] (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

09/980,680

LANSWER 20 OF 106 CAPLUS COPYRIGHT 2003 ACS On STN
CONSTRUCTION NUMBER: 1999:819351 CAPLUS
132:64532
111LE: PROPERTY NUMBER: 132:64532

INVENTOR(S):

132:64532
Preparation of cyclic amino acid compounds for inhibiting .bets.-amyloid peptide release and/or its synthesis
Audia, Janes E.; Porter, Warren J.; Thompson, Richard C.; Wilkie, Stephen C.; Stack, Douglas R.; Shi, Qing Elan Pharmaceuticals, Inc., USA; Eli Lilly & Company PCT Int. Appl., 287 pp.
CODEN: PIXXD2
Patent PATENT ASSIGNEE (S):

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

AB CCAMPAS RIZHH(Y) AN WE is a fused ring system, e.g., benzo-or dibenzoarepinones or -diseptiones, Y = CHEZONI, between Y -T-CYC'Y -Y -bere T is selected from the group consisting of a bond covalently linking RI to 2007 V is alkyl, aryl, heteroaryl, together form an ox group. V is alkyl, aryl, tetroaryl, together form an ox group. V is alkylene or substituted alkyl, aryl, tetroaryl, together form an ox group. V is alkylene or substituted alkyl, aryl, theteroaryl, tracking alkyl, aryl, theteroaryl, the covalently linking RI to -T-CX'X''. v syen, sulfur and -NRG (RG - H, acyl, together form an ox group. V is alkylene or substituted alkyl, aryl, theteroaryl, the covalently aryl, the covalently in a function of the function of the covalently or alkylene or substituted alkyl, aryl, theteroaryl, the covalently covalently inking RI to -CX'X''. v syen, sulfur and -NRG (RG - H, acyl, together form an ox group. V is alkylene or substituted alkylene or substitut

L62 ANSWER 20 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-20-6 CAPLUS Carbamic acid, [7-bromo-5-(2-fluorophenyi)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-28-4 CAPLUS 203783-20-4 CAPUS
Carbamic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-17-1P 209985-25-1P 209985-32-0P
209985-33-1P 209986-63-0P 209986-66-3P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT
(Reactant or reagent):
(prepn. of cyclic amino acid compds. for inhibiting .beta.-amyloid
peptide release):
209985-17-1 CAPLUS
Carbanic acid, (7-chloro-2, 3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4benzodiazepin-3-yl)-, phenylaethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS
Carbanic acid, {7-chloro-5-{2-chlorophenyl}-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl}-, phenyimethyl ester (SCI) (CA INDEX NAME) Page 31

L62 ANSWER 20 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) dibenz[b,d]azepin-6-one was prepd. by reductive alkylation of 5-(5)-(L-alaninyl]anino-7-methyl-5,7-dihydro-Gh-dibenz[b,d]azepin-6-one hydrochloride with 3,5-difluorophenylacetaldehyde using socium cyanoborohydride. Compds. of the invention inhibit. beta.-amyloid peptide prodn. by at least 30% as compared to the control when employed at 10 10885-98-3 155452-87-2 168162-29-6 209985-20-6 209985-28-4 RL: RCT (Reactant), RACT (Reactant or reagent) (prepn. of cyclic anino acid compds. for inhibiting .beta.-amyloid peptide release) 108895-98-3 CAPLUS CAPLUS (CA INDEX NAME)

155452-87-2 CAPLUS
Carbanic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylnethyl ester (9CI) (CA INDEX NAME)

Ph-CH2-0

168162-29-6 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
1,1-dinethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 20 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

Ph-CH2-0-0

209985-32-0 CAPLUS
Carbamic acid, {2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1}-, phenylmethyl ester (9CI) (CA INDEX NAME)

0

209985-33-1 CAPLUS Carbamic acid, (2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209986-63-0 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-1-(2-oxo-2-phenylethyl)-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

ANSWER 20 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 209986-66-3 CAPLUS Carbamic acid, [2,3-dibydro-2-oxo-5-phenyl-1-(4,4,4-trifluorobutyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

LSA ANSWER 21 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1999:819249 CAPLUS DECUMPANT NUMBER: 132:64531
TITLE: Prenaration of

132:64531
Preparation of cyclic amino acid compounds for inhibiting .beta.-amyloid peptide release and/or its

Synthesis E.: Dressman, Bruce A.: Shi, Qing Radia, James E.: Dressman, Bruce A.: Shi, Qing Elan Pharmaceuticals, Inc., USA: Eli Lilly & Company PCT Int. Appl., 256 pp. CODEN: PIXMO2 INVENTOR (S): PATENT ASSIGNER (S): SOURCE:

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: FATENT INFORMATION:

PRI

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| | | | DE, | DK. | EE, | ES, | FI, | GB, | GĐ, | GE, | GH, | GM, | HR, | HU, | ID, | IL. | IN. | IS. |
| | | | JP, | KE. | KG, | KP, | KR, | KZ, | LC, | LK. | LR, | LS. | LT. | w. | LV, | MD. | MG. | MK. |
| | | | MN, | ΗV, | MX, | NO, | NZ, | PL, | PT, | RO, | RU. | SD. | SE. | SG. | SI, | SK. | SL. | TJ. |
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| | | | ES, | FI. | FR, | GB, | GR, | IE, | IT. | w. | MC. | NL. | PT. | SE. | BF. | BJ. | CF. | CG. |
| | | | CI, | CH, | GA, | GN, | GV, | ML, | MR, | NE. | SN, | TD. | TG | | , | , | , | , |
| | CA | 2324 | 1475 | | A | A. | 1999 | 1229 | | Ċ. | A 19 | 99-2 | 3244 | 75 | 1999 | 0622 | | |
| - 2 | ΑU | 9947 | 104 | | A | 1 | 2000 | 0110 | | A | 199 | 99-4 | 7104 | | 1999 | 0622 | | |
| 1 | EΡ | 1093 | 372 | | A | 1 | 2001 | 0425 | | E | P 19 | 99-9 | 3060 | n | 1999 | 0622 | | |
| | | R: | AΤ, | BE. | CH, | DE. | DK. | ES. | FR. | GB. | GR. | IT. | 1.1. | 1.33 | N7. | SP | wc | PŦ |
| | | | IE. | FI | | | | | | , | , | | , | ٠, | , | 544 | , | , |
| | JΡ | 2002 | 5184 | 51 | T | 2 . | 2002 | 0625 | | 3 | 200 | 00~5 | 5562 | | 1999 | 1622 | | |
| OR | IT | APP | LN. | INFO | . : | | | | | | | | | | 1998 | | | |
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US 1998-102507 A2 19980622
US 1998-164651 A2 19980930
OTHER SOURCE(S):

MARPAT 132:6451 31 1999-US14211 V 19990622

AB Compds. R'R'NCHRICONH(Y)nW and R':RC(:R1)CONH(Y)nW [W is a fused ring system, e.g., benzo- or dibenzoarepinones or -diarepinones; Y = CHR2CONH, where R2 = (un)substituted alkyl, alkenyl, or alkynyl, cycloalkyl, arryl, heterocyclyl: R1 and R' form a nitrogen-conty. beterocycle: R'' = H, alkyl, substituted alkyl, arryl: n = 1 or 2] were prepd. for inhibition of .beta.-amyloid peptide release and/or its synthesis. Thus, 5-(5)-[N' -(L-prolyl)-L-alaninyl)smino-7-methyl-5, 7-dihydro-GH-dibenz(b, d)szepin-6-one was prepd. vio acoupling of N-(N'-tert-butoxycarbonyl-L-prolyl)-L-alanine with 5-(5)-amino-7-methyl-5, 7-dihydro-GH-dibenz(b, d)szepin-6-one. Compds. of the invention inhibit .beta.-amyloid peptide prodn. by at least 30% as compared to the control when employed at 10 .mu, g/AL.

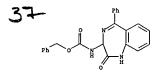
11 108995-29-5 209898-28-4

RI: RCT (Reactant): RACT (Reactant or reagent)

RL: RCT (Reactant): RACT (Reactant or reagent)
(prepn. of cyclic amino acid compds. for inhibiting .beta.-amyloid peptide release)
10895-98-3 CAPUS

Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,

L62 ANSWER 21 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN phenylmethyl ester (9CI) (CA INDEX NAME) (Continued)



155452-87-2 CAPLUS
Carbamic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

66

168162-29-6 CAPLUS Carbamic acid, (2.3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1,1-diaethylethyl ester (9CI) (CA INDEX NAME)

209985-20-6 CAPLUS
Carbanic acid, [7-bromo-5-{2-fluorophenyl}-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 21 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-28-4 CAPLUS
Carbamic acid, [7-chloro-5-(2-chlorophenyl)-2, 3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-17-1P 209985-25-1P 209985-32-0P 209985-33-1P 209985-63-0P 209985-33-1P 209986-63-0P 209986-65-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of cyclic amino acid compds. for inhibiting .beta.-amyloid peptide release) 209985-17-1 CAPUS Carbamic acid, (7-chloro-2,3-dihydro-1-mathyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS
Carbanic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dibydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

09/980,680

L62 ANSWER 21 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-32-0 CAPLUS Carbanic acid, (2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yll-, phenylnethyl ester (SCI) (CA INDEX NAME)

209985-33-1 CAPLUS
Carbanic acid, (2,3-dihydro-1-methyl-7-mitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

209986-63-0 CAPLUS
Carbamic acid, {2,3-dihydro-2-oxo-1-(2-oxo-2-phenylethyl)-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 22 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:267972 CAPLUS

DOCUMENT NUMBER: 131:19061

TITLE: Pree and Supported Phosphorus Ylides as Strong Neutral Bronsted Bases

AUTHOR(S): Gount-Magnet, Stephanie; Guerret, Olivier; Gornitzka, Heinz; Cazaux, Jean Bernard; Bigg, Dennis; Palacios, Francisco; Bertrand, Guy

Laboratoire de Chimie de Coordination, Toulouse, 31077, Pr.

SOURCE: Journal of Organic Chemistry (1999), 64(10), 3741-3744

CODEN: JOCEAH; ISSN: 0022-3263

American Chemical Society

Journal LANGUAGE: CASREACT 131:19061

To a dimethoxymethane soln. of P(NMe2)3 was added at room temp.

2-iodopropane. The soln. was stirred under reflux for 72 h, producing
[P(NMe2)3Pr-i]1 in 911 yield. Potassium hydride was added at 0.depree. to
a suspension of [P(NMe2)3Pr-i]1 in THF and stirred at room temp. Forming
(NMe2)3P:C(Me)2 in 755 yield. A THF soln. of (NMe2)3P:C(Me)2 was then
added at -78.degree. to a THF soln. of bencodiazepines I (R - Me.
CH2CO2t-Bu, or CH2Ph) and stirred at room temp. for 1 h. Albyl halides
R'X (R - CH2Ph, CH2CO2t-Bu, or He), (X - Br or I) were then added and the
soln. was stirred for an addnl. hour, producing benzodiazepines II (some
R' and R) in 38-671 yield. An x-ray crystal structure of II (R - Me.
CH2Ph), (space group C222(1), Z - 8, MR2 - 0.3114) was detd. The pXa
value of [P(NMe2)3Pr-i]1 was found to be between 26 and 28 using 31P NMR
spectroscopy. The use of ylides as strong nonnucleophilic bases was
investigated by reaction of P(NMe2)3 with Merrifield's resin.

RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of)
217189-29-22 (ZAPLUS
IH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-1(phenylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 21 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209986-66-3 CAPLUS
Carbanic acid, [2,3-dibydro-2-oxo-5-phenyl-1-{4,4,4-trifluorobutyl}-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

(CH2) 3 - CF3

REFERENCE COUNT: THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 22 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

217189-31-6 CAPEUS IH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-1-methyl-2-oxo-5-phenyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

217189-32-7 CAPLUS
1H-1,4-Benzodiazepine-1,3-diacetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

09/980,680

ANSVER 23 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN COSSION NUMBER: 1999:126921 CAPLUS DOCUMENT NUMBER: 130:153987 TITLE: 120:153987 Preparation of selective factor 130:153987
Preparation of selective factor Xa inhibitors containing a fused diszepinone structure Scarborough, Robert M.
Cor Therapeutics, Inc., USA
FCT Int. Appl., 65 pp.
CODES: PIXMO2
Patent INVENTOR (S): PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: LANGUAGE: Patent English PAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 22 20010828 JP 2000-506232 19980811 31 20011225 US 1998-132228 19980811 US 1997-82316P P 19970811 US 1997-907779 A 19970811 US 1997-907779 A 19970811 WO 1998-US16704 W 19980811 MARPAT 130:153987 OTHER SOURCE(S):

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Novel title compds. I [R1, R2 = H, C1-6 alkyl, C3-8 cycloalkyl, C1-3 alkylaryl, C1-3 alkyl-C3-8 cycloalkyl, aryl; R3 = H, C1-6 alkyl; CR2R3 = carbocyclic ring; n = 0-4; n = 0-1; p = 0-4; q = 0-1; A, J, L = R8, NR8R9, NR10 (RNRR12):NR11, CR10R1R11, CR10R12:RR11, CR13:NR11, SC (NRRR13):NR11; R8-R11 = H, OH, C1-6 alkyl, aryl; C1-4 alkylaryl; R12 = H, C1-6 alkyl, aryl; C1-4 alkylaryl; R12 and R11 form 5-6 membered ring; R13 = H, C1-6 alkyl, aryl; C1-4 alkylaryl; R13 and R11 form 5-6 membered ring; D, H = bond, C3-8 cycloalkyl, C1-6 alkenyl, C1-6 alkylaryl; R13 and R11 form 5-6 membered ring; D, H = bond, C3-8 cycloalkyl, C1-6 alkylaryl; G1-6 alkenyl, c1-6 alkylaryl; R13 and R11 form 5-6 membered ring; D, H = bond, C3-8 cycloalkyl, C1-6 alkylaryl; G1-6 alkylary

L62 ANSWER 23 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) (CH2) 3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

220320-49-0 CAPLUS
Carbanic acid, [2,3-dihydro-1-[2-([(1S)-4-[[imino][(4-methylphenyi)sulfomyl]amino]methyl]amino]-1-(2-thiazolylcarbonyl]butyl]amino]-2-coxoethyl]-2-coxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, SH-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 24 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

ESSION NUMBER: 1998:785-666 CAPLUS
1302:52080 Preparation of benzodiazepinone derivatives as inhibitors of Ram farnesyl-protein transferase
ENTOR(S): Hardware, James C., Jr., Brown, Hichael S.; Crowley, Craig W.; Goldstein, Joseph L.; James, Guy L.; Mcdowell, Robert S.; Oare, David; Rawson, Thomas E.; Reynolds, Mark; Somers, Todd C.

ENT ASSIGNEE(S): Genentech Inc., USA; Board of Regents University of Texas
U.S., 277 pp., Cont.-in-part of U.S. Ser. No. 82,202, abandoned.
CODEN: USXCAM
Patent
SUAGE: Patent
English
LLY ACC, NUM. COUNT: 2 OCCUENT NUMBER: INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 5943941 A 19581201 US 1994-313068 199409206
WO 9426723 A2 19941124 WO 1994-US5157 19940510
A3 19950202
W: AU, BB, BC, BR, BY, CA, CN, CZ, FI, GE, KH, JP, KG, KP, KR, KZ, LK, LV, MD, MG, MN, MV, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, US, UZ, VN

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, EF, F3537 A2 19970319 EP 1995-118160 19940510
EP 763537 A3 19971022
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE US 1993-61961 19930614
WO 1994-US5157 19940510
CTHER SOURCE(S): MARPAT 130:25080

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A variety of benzodiazepine deriva. and various bicyclic and tricyclic analogs are disclosed. For instance, compds. I are among those claimed [wherein: R, R' = H, halo, (halo)alkyl, alkoxy, R4, R4' = H, halo, (halo)alkyl, alkoxy, R4, R4' = H, halo, (halo)alkyl, alkyl, alkyl,

ANSWER 24 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
C-3. For example, one disstereomer of III inhibited the growth of the
human fibrosarcoma cell line HT 1080 both in vitro (64% inhibition at 25
.mu.H) and in vivo in nude mice. Several figures are included.
164336-13-47 164336-14-59 164336-15-69
RI: RCT (Reactant). STN (Synthetic preparation): PREP (Preparation): RACT
(Reactant or reagent)
(intermediate; prepn. of benzodiatepinone derivo. as inhibitors of Ras
farnesyl-protein transferase)
164336-13-4 CAPLUS
IH-1,4-Benzodiazepine-1-acetic acid, 3-{[(1,1dinethylethoxylcarbonyl]amino]-2,3-dihydro-2-oxo-5-phenyl- (9CI) (CA
INDEX NAME)

L-Methionine, N-443-ff(1,1-dimethylethoxy)carbonyl]methylamino]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-1-yl]acetyl}-, methyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 25 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:779820 CAPLUS
DOCUMENT NUMBER: 130:52578
TITLE: Phosphorus ylides, their preparation and use as low-nucleophilic strongly-basic compounds
Bertrand, Guyn Bigg, Dennis; Cazaux, Jean-Bernard; Gouari, Stephanie; Guerret, Olivier
Societe De Conseils De Recherches Et D'Applications Scientifiques (S.C.R.A.S. Fr.; Centre National de la Recherche Scientifique (C.N.R.S.)

DOCUMENT TYPE: CODEN: EPXXDW
Patent
LANGUAGE: FRENCH

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 881235 A1 19981202 EP 1997-401142 19970526

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

WO 9854229 A1 19981203 WO 1998-FR1048 19980526

V: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, KR, KZ, LC, LK, LK, LS, LT, LU, LV, MD, MG, MM, MY, MX, NO, NZ, PL, PT, RO, SE, SG, SI, SK, SL, TJ, TH, TT, TT, UA, US, UZ, VN, VU, ZV

RW: GH, GM, KE, LS, MY, SD, SZ, UG, ZV, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CA, GA, GN, ML, MR, ME, SN, TD, TG

AU 9877765 A1 20000326 R1 1998-925783 19980526

EP 986585 A1 20000326 R2 1998-925783 19980526

EP 986585 B1 20030326 R2 1E, FI, LI, LU, NL, SE, MC, PT, IE, FI, FI, CA, DE, DK, ES, FG, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CA, DE, DK, ES, FG, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CA, DE, DK, ES, FG, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CA, DE, DK, ES, FG, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI 2002504190 T2 20020212 JP 1999-500320 19980526

EN 20125520 E2 20030415 AT 1998-925783 19380526

AT 235520 RU 2205842 US 6222032 NO 9905771 PRIORITY APPLN. INFO.:

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2002504900 T2 2002012 JP 1999-500320 19980526
AT 235520 E 20030415 AT 1999-925783 19980526
RU 2205842 C2 20030610 RU 1999-128084 19980526
RU 2205842 C2 20030610 RU 1999-128084 19980526
RU 2622032 B1 20010424 US 1999-423269 19991104
NO 9905711 A 19991125 NO 1999-5771 19991125
RITY APPLN. INFO: FP 1997-401142 A 19970526
V1ide Me2C:PF (NMe2) 3 [1], prepd. From Merrifield resin and P(NMe2) 3, was used as a basic catalyst in N- and C-alkylation reactions to give 17
alkylated products. E.g., treatment of nordizepan with benzyl bromide in the presence of I gave 761 1-benzylnordizepan, which, treated with MeI and I, gave 678 1-benzylnordizepan.
21199-29-22 21199-31-69 21199-31-27*P
RL: SPN (Synthetic preparation) PREP (Preparation)
(prepn. and use of phosphorus ylides as catalysts for N- and C-alkylation)
217199-29-2 CAPLUS
IH-1,4-Benzodizepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-1-(phenylmethyl)-, 1,1-dimethylethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 24 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

164338-23-27

RL: BAC (Biological activity or effector, except adverse); BSU (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREF (Freparation); USES (Uses) (prepn. of benzodiazepinone derivs. as inhibitors of Ras farnesy)-protein transferase)
164338-23-2 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 7-chloro-3-{{(1,1-disactylethoxy)carbonyl]amino]-5-{2-fluorophenyl}-2,3-dihydro-2-oxo-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

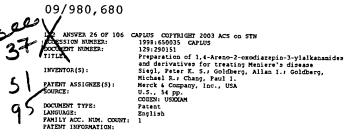
THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 25 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

HH-1,4-Benzodi azepine-3-acetic acid, 7-chloro-2,3-dihydro-1-methyl-2-oxo-5-phenyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

217189-32-7 CAPLUS
1H-1,4-Benzodiazepine-1,3-diacetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

ţ



APPLICATION NO. DATE US 5817658
PRIORITY APPLN. INFO.:
OTHER SOURCE(5):
GI PATENT NO. KIND DATE US 1997-881296 A 19981006 19970624 19970624 US 1997-881296 MARPAT 129:290151

A method for the treatment of Meniere's disease in mammals, including humans, comprises the administration of a therapeutically ED of prepd.

1,4-areno-2-oxodiazepin-3-ylalkananides I [ring conto, A = thiseno, pyrido, [un] substituted benzo; X = 0, S, NNH2, NOH, H2; Y = 0, NCH, H2; P. various (un) substituted Cl-6 slkylene, C2-4 alkenylene, -(CE2)-n-(n = 0-4, V = 0, S, NH), 4-(S-nethylinoxazol-3-yl), C3-6 cycloalkylene, single bond; p = 0 or 1; R1 = (un) substituted Ph, cycloalkylene, beterocyclyls, He, indan-5-yl; R2 = (un) substituted Ph, alkyls, cycloalkyls, 2 or 3-furyl, 1-nethylpiperidin-2-yl; R3-R4 = H, alkyl, etc.; R5 = H, 0, defined heterocyclyls) and analogs which modulate the IKs channel of the ear and thereby reduce endolymph prodn.

201988-64-99

ZOISBU-Se-SF RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (for prepa. of 1,4-areno-2-oxodiazepin-3-ylalkanamide deriv.) 201988-64-9 CAPLUS

Glycine, N-[(3R)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl}-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry,

ANSWER 26 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
study), PREP (Preparation), USES (Uses)
(prepn. of 1,4-areno-2-oxodiazepin-3-ylalkanamides and analogs for
treating Meniere's disease)
146:135-15-1 CAPLUS
Carbamic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

170284-32-9 CAPLUS Carbamic acid, [(3R)-2,3-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

51

170284-51-2 CAPLUS Glycine, N-(3-cyclohexyl-1-oxopropyl)-N-(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yi)-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

170284-54-5 CAPLUS
Glycine, N-{(3S)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-N-(1-oxohaxyl)-, ethyl ester (9CI) (CA INDEX NAME)

Page 36

L62 ANSWER 26 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

IT

106849-47-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(for prepn. of 1,4-areno-2-thiodiazepin-3-ylalkanamide deriv.)
106849-47-2 CAPLUS
Carbanic acid, (2,3-dihydro-1-methyl-2-cxo-5-phenyl-1H-1,4-benzodiazepin-3-yl1-, phenylmethyl ester (SCI) (CA INDEX RAME)

ΙT 170551-99-2P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); FREP (Preparation); RACT (Reactant or reagent); USES (Uses)

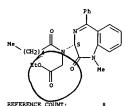
USES (Uses)
(prepn. of 1.4-areno-2-oxodiazepin-3-ylalkanamides and analogs for treating Meniere's disease)
170551-99-2 CAPLUS
Carbamic acid, ((3R)-2.3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1.4-benzodiazepin-3-yll-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ΙŤ 146135-15-1P 170284-32-9P 170284-51-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

L62 ANSWER 26 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) Absolute stereochemistry. Rotation (+).



THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR (5):

ANSVER 27 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN SION NUMBER: 1998:608608 CAPLUS 129:245485

CENSION NUMBER OCUMENT NUMBER:

129:245485
Preparation of heterocyclic compounds and their use for inhibiting .beta.-amyloid peptide release Thorsett, Eugene D.; Porter, Varren J.; Nissen, Jeffrey S.; Latiner, Lee H.; Audie, James E.; Droste, James J. Athena Neurosciences, Inc., USA; Eli Lilly & Co.

PATENT ASSIGNEE (S): SOURCE:

PCT Int. Appl., 392 pp. CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PAT | ENT : | NO. | | KI | ďΩ | DATE | | | | PPLI | CATI | ON N | ٥. | DATE | | | |
|----------|-------|------|-------|-----|-----|------|------|------|------|------|------|------|-----|------|------|-----|-----|
| | | | | | | | | | | | | | | | | | |
| WO | 9838 | 177 | | A | 1 | 1998 | 0903 | | W | 0 19 | 98-U | 5337 | 3 | 1998 | 0227 | | |
| | v: | AL, | AM, | λT, | AU, | λZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | Cυ, | CZ, | DE, |
| | | DK, | KE, | ES. | FI. | GB, | GE. | GH. | GM. | GV. | HU. | ID. | IL. | IS. | JP. | KE. | KG. |
| | | KP. | KR. | KZ. | LC. | LK. | LR. | LS. | LT. | w. | LV. | MD, | MG. | MK. | MN. | MV. | MX. |
| | | | | | | | | | | | | 5K. | | | | | |
| | | | | | | | | | | | | KG. | | | | | |
| | RW: | | | | | | | | | | | BE. | | | | | |
| | • | | | | | | | | | | | BF. | | | | | |
| | | | | | | | SN. | | | | J. | ы, | ٠., | ٠., | ω, | | ٠., |
| 71 | 9801 | | | | | | | | | . 10 | 00.1 | 627 | | 1000 | 0226 | | |
| | 9866 | | | | | | | | | | | | | | | | |
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| EP | 9681 | | | | | | | | | | | | | | | | |
| | R: | | | | | | | | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | | | | | RO | | | | | | | | | | |
| | 9807 | | | | | | | | | | | | | | | | |
| | 2001 | | | | | | | | | | | | | | | | |
| | 9904 | | | | | | | | | | | | | | | | |
| PRIORITY | APP | LN. | INFO. | . : | | | | | US 1 | 997- | 8082 | 63 | A1 | 1997 | 0228 | | |
| | | | | | | | | | | | | 73 | | | | | |
| OTHER SO | URCE | (S): | | | MAR | PAT | 129: | 2454 | 85 | | | | | | | | |

Disclosed are modified heterocyclic di- and tripeptide analogs which inhibit .beta--amyloid peptide release and/or its synthesis, and, accordingly, have utility in treating Alzheimer's disease. Also disclosed

L62 ANSWER 27 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209985-17-1P 209985-20-6P 209985-25-1P
209985-32-0P 209985-33-1P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of heterocyclic compds. and their use for inhibiting .beta.-amyloid peptide release)
209998-17-1 CAPLUS
Carbamic acid, (7-chloro-2, 3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-20-6 CAPLUS

Carbamic acid, [7-bromo-5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-25-1 CAPLUS

Zupysb-25-1 Carkers Carbamic acid, [7-chloro-5-{2-chlorophenyl}-2,3-dihydro-1-methyl-2-oxo-lH-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 209985-32-0 CAPLUS

Page 37

L62 ANSWER 27 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) are pharmaceutical compns. comprising a compd. which inhibits .beta.-amyloid peptide release and/or its synthesis as well as methods for treating Altheiner's disease both prophylactically and therapeutically with such pharmaceutical compns. Title compds., e.g. I, were prepd. in a multistep synthesis and inhibited beta.-amyloid peptide prodn. by at least 30% as compared to control.

135852-87-2 209985-22-8 209985-22-4
RL: RCT (Reactant): RACT (Reactant or reagent) (prepn. of beterocyclic compds. and their use for inhibiting .beta.-amyloid peptide release)
RN 155452-87-2 CAPLUS
CN Carbanic acid, (7-chloro-2, 3-dihydro-2-oxo-5-phenyl-1H-1, 4-benzodiazepin-3-yll-, phenylmethyl ester (9CI) (CA INDEX NAME)

209985-22-8 CAPLUS
Carbanic acid, [7-brono-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

209985-28-4 CAPLUS
Carbanic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

L62 ANSWER 27 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN Carbamic acid, (2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1)-, phenylmethyl ester (9CI) (CA INDEX NAME)

$$Ph-CH_2-O-C-NH$$

$$N=$$

$$NO_2$$

$$NO_2$$

RN CN 209985-33-1 CAPLUS

Zoryan-13-1 Carbanic acid, (2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSVER 28 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN SSION NUMEER: 1998:591178 CAPLUS
MEDIT NUMEER: 129:275897

L29:27597
Lipase-catalyzed acetylation of 3-substituted
2,3-dibydro-1H-1,4-benzodiazepin-2-ones. Effect of
temperature and conformation on enantioselectivity and
configuration
Avdagic, Amir, Lesac, Andrejs, Majer, Zsuzsa, Hollosi,
Miklos; Sunjic, Vitomir
Ruder Boskovic Institute, Zagreb, 10000, Croatia
Helvetica Chimica Acta (1998), 81(8), 1567-1582
CODEN: ECACAV; ISSN: 0018-019X
Verlag Helvetica Chimica Acta AG
Journal
English

AUTHOR (S) :

CORPORATE SOURCE: SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: English CASREACT 129:275897 OTHER SOURCE (5):

L62 ANSWER 29 OF 106
ACCESSION NUMBER:
1998:479505 CAPLUS
129:122870
Preparation of cycloalkyl, lactam, lactone and related compounds for inhibiting beta.-amyloid peptide release and/or its synthesis
INVENTOR(S):

Wu, Jing; Tung, Jay S.; Thorsett, Eugene D.; Pleiss, Michael A.; Nissen, Jeffrey S.; Neitz, Jeffrey; Latimer, Lee H.; John, Varghese; Freedman, Stephen; Britton, Thomas C.; Audia, James E.; Reel, Jon K.; Mabry, Thomas E.; Dressman, Bruce A.; Cvi, Cynthia L.; Droste, James J.; Henry, Steven S.; Mcdaniel, Stacey L.; Soctt, William Leonard; Stucky, Russell D.; Porter, Warren J.
Athena Neurosciences, Inc., USA; Eli Lilly & Co.
PCT Int. Appl., 889 pp.
CODEN: PIXON2
PATENT INFORMATION:
English
PATENT INFORMATION:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE CN 1242007 A 20000119 CN 1997-180901 19971222
BR 9714517 A 20000704 BR 1997-14517 19971222
JP 2000511932 T 2 20000912 JP 1998-528867 19971222
NZ 335583 A 20010330 NZ 1997-335583 19971222
NX 9905844 A 20000731 MX 1999-5844 19990621
NO 9903099 A 19990820 NO 1999-3098 19990622
US 2002045747 A1 20020418 US 2001-916202 20010730
US 2002045747 A1 20020418 US 2001-916202 20010730
US 2002055500 A1 20020509 US 2001-916400 20010730
PRIORITY APPLN. INFO.: US 1996-64851P P 19961223
US 1996-64851P P 19961223
US 1996-64851P P 19961223
US 1996-64081P P 19961223
US 1996-64081P P 19961223
US 1997-996422 A3 19971222
OTHER SOURCE(S): MARPAT 129:122870
OTHER SOURCE(S): MARPAT 129:122870
AB Disclosed are compds. RIZENHYNCHPRZC(X)R 3R1 = (un) substituted alky1, alkynyl, cycloalkyl, or cycloalkenyl or aryl, heteroaryl, or heterocyclic; RZ and R3 forn a cycloalkyl, cycloalkenyl or aryl, heteroaryl, or heterocyclic; RZ and R3 forn a cycloalkyl, cycloalkenyl ring which is optionally fused; X = oxo, thioxo, hydroxyl, thiol, or hydro; Y = CHRCONH PAGE 38

ANSWER 28 07 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation): RACT
(Reactant or reagent)
(lipase-catalyzed stereoselective acetylation of hydroxyalkylated
dihydrobenzodiazepinones)
213753-75-4 CAPLUS
1H-1.4-Benzodiazepine-3-acetic acid, 7-chloro-2, 3-dihydro-1-methyl-2-oxo-5phenyl-, ethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 29 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
heteroaryl, or heterocyclic: Z is TCX'X''CO where T is a bond, O, S, NRS
(R5 = H, acyl, alkyl, aryl, or heteroaryl), X' and X'' are H, OH, or F or
X'X'' = oxor m, p = 0, 1; n = 0, 1; 2} which inhibit beta-amyloid
peptide release and/or its synthesis, and, accordingly, have utility in
treating Alzheiner's disease. Thus, 3-([N'-0],4-]
methylenedioxyphenylacetyl]-L-alaninyl]amino]-2,3-dihydro-1-methyl-5phenyl-1H-1,4-benzodiazepin-2-one was prepd. by coupling of
3-(L-alaninylamino)-2,3-dihydro-1-methyl-5-phenyl-1H-1,4-benzodiazepin-2one with 3,4-methylenedioxyphenylacetic acid.

II 108955-92-3 15545-97-2 166162-29-6
209985-22-8 209985-28-4
RE: RCT (Reactant): RACT (Reactant or reagent)

RE: RCT (Reactant): RACT (Reactant or reagent)
(prepn. of cycloalkyl, lactam, lactone and related compds. for inhibiting .beta.-amyloid peptide release and/or its synthesis)
108895-98-3 CAPLUS

108895-98-3 CAPIUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

155452-87-2 CAPLUS
Carbamic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

168162-29-6 CAPLUS Carbanic acid, (2.3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1)-, 1,1-diaethylethyl ester (9CI) (CA INDEX NAME)

ANSVER 29 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 203985-22-8 CAPLUS Carbanic scid, (7-bromo-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-HR-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

20995-28-4 CAPLUS Carbanic acid, [7-chloro-5-(2-chlorophenyl)-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9Cl) (CA INDEX NAME)

209985-17-1P 209985-20-6P 209985-25-1P 209985-32-0P 209985-33-1P 209986-63-0P 209986-66-3P

209986-66-3P
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. of cycloalkyl, lactam, lactone and related compds. for inhibiting .beta.-amyloid peptide release and/or its synthesis)
209985-17-1 CAPLUS
Carbanic acid, (7-chloro-2,3-dihydro-1-methyl-2-cxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

209985-20-6 CAPLUS

L62 ANSWER 29 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

209986-63-0 CAPLUS
Carbamic acid, [2,3-dihydro-2-oxo-1-(2-oxo-2-phenylethyl)-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 29 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN Carbanic acid, [7-brono-5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9C1) (CA INDEX MAME)

209985-25-1 CAPLUS
Carbanic acid, (7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yll-, phenylmethyl ester (9CI) (CA INDEX NAMZ)

209985-32-0 CAPLUS Carbanic acid, (2,3-dihydro-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yll-, phenylnethyl ester (SCI) (CA INDEX NAME)

209985-33-1 CAPLUS

Carbanic acid, (2,3-dihydro-1-methyl-7-nitro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

INVENTOR(S):

DATE TO TYPE:

LANGUAGE:

DOCUMENT TYPE:

LANGUAGE:

DOCUMENT TYPE:

LANGUAGE:

DATE TAKEN TO THE TO THE TRAINING THE TRA

PATENT NO. KIND DATE

PATENT NO. KIND DATE APPLICATION NO. DATE

US 5776930 A 19980707 US 1997-881399 19970624

PRIORITY APPIN. INFO.: US 1997-881399 19970624

OTHER SOURCE(S): MARRAT 129:109102

AB A method of preventing, treating, terminating and protecting against cardiac arrhythmias, such as atrial, supraventricular and ventricular ectopy, tachycardia, flutter or fibrillation, including atrial, supraventricular and ventricular arrhythmias resulting from myocardial ischemic injury in a patient in need thereof, comprising administration of a selective IKs antagonist and a beta-adrenergic receptor blocking agent, administered in combined therapy either simultaneously, sep. or sequentially is presented. Addnl., a pharmaceutical prepn. comprising a selective IKs antagonist and a beta-adrenergic receptor blocking agent, wherein these compds. are administered simultaneously, sep. or sequentially is presented. The combined administration of both low dose IKs blocker of this invention and low dose timolol provided significant protection against development of malignant ischemic ventricular tachyarrhythmia in dogs.

IT 14613-15-19 170284-32-99 170284-51-2P

170284-54-59 170551-99-2P

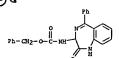
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzodiazepinone derivs. for treatment of cardiac arrhythmias)

EN 146135-15-1 CAPLUS

CA Carbamic acid. (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

APPLICATION NO. DATE



170284-32-9 CAPLUS
Carbamic acid, {(3R)-2,3-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester {9CI} (CA INDEX NAME)

L62 ANSWER 30 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN Absolute stereochemistry. Rotation (+). (Continued)

51

170284-51-2 CAPLUS Glycine, N=(3-cyclohexyl-1-oxopropyl)-N=(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H=1,4-benzodiazepin-3-yl)-, ethyl ester, (+) - (9CI) (CA INDEX NAME)

Rotation (+).

31

170284-54-5 CAPLUS 1/024-54-5 CAPUS Glycine, N.-[(35]-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-N-(1-oxohexyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

170551-99-2 CAPLUS

Absolute stereochemistry. Rotation (+).

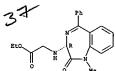
106849-47-2
RI: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of benzodiarepinone derivs. for treatment of cardiac
arrhythmias)
106849-47-2 CAPLUS
Carbanic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3yl)-, phenylmethyl ester (9CI) (CA INDEX NAME) IT

ANSWER 30 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) Carbanic acid, ([TR]-2.3-dibydro-1-nethyl-2-oxto-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylinethyl ester (SCI) (CA INDEX KAME)

201988-64-9P 210096-68-7P

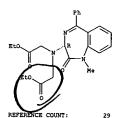
Absolute stereochemistry.

L62 ANSWER 30 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



210096-68-7 CAPLUS Glycine, N-[(3)]-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yll-N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

LA ANSWER 31 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
1598:471646 CAPLUS
DOCHERT NUMBER: 1599:471664 CAPLUS
129:109332
TITLE: Preparation of boronophenyl analogs of phosphotyrosines for inhibiting SH2 domain interactions of peptides
INVENTOR(S): Bachovchin, Villiam V.
PATENT ASSIGNEE(S): Tufts University, USA
U.S., 42 pp., Cont.-in-part of U.S. 5,580,979.
CODEN: USXXAM
Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

DOCUMENT TIPE.
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----|---------------------|----------|--------------|---------------------|------------------|
| | | | | | |
| | US 5776902 | A | 19980707 | US 1995-454920 | 19950531 |
| | US 5580979 | A | 19961203 | US 1994-214643 | |
| PRI | ORITY APPLN. INFO. | | | US 1994-214643 | 19940315 |
| AB | Peptidomimetics | having | one or more | amino acid residue | s with side chai |
| | RO (R10) B (CH2) mC | 5H4 (CH2 |) n (R, R1 = | H, alkyl or togethe | r form a heteron |
| | ring; m = 0-8, ; | a = 1-3 |), which may | have addnl. substi | tuents in the be |

cyclic cenzene ring, m = 0-8, n = 1-3), which may have addnl. Substituents in the benzeme ring, were prepd. for inhibiting kinases, phosphatases and SHZ domains, e.g., an interaction between a protein conto, an SHZ domain and phosphotyrosine-conto, polymeptide. The synthesis of 1,3-dihydro-1-(seathony)-carbonylmethyll-5-phosphol-3(R,5)-lacetyl(phosphono-L-tyrosyl)aminol-ZH-1,4-benrodiazepin-2-one is described and its ability to inhibit the interaction between services and shift of the interaction between the services of the services of

172968-03-79
RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of boronophenyl analogs of phosphotyrosines for inhibiting SH2 domain interactions of peptides)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

119487-58-0 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 2,3-dibydro-2-oxo-5-phenyl-3[[(phenylmethoxy)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 31 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

172968-04-6 CAPLUS 1H-1,4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3-[[(phenylmethoxy)carbonyl)amino]- (9CI) (CA INDEX NAME)

172968-05-7 CAP-92
L-Isoleucine, N-[[Z.J-dihydro-Z-oxo-5-phenyl-3[[[phenylanthoxy]carbonyl]anino]-1H-1,4-benzodiazepin-1-yl]acetyl]-,
methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 32 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN US 1994-345820 42 19941121 W0 1997-US21636 W 19971205 CTT MARPAT 129:68032 (CONTINUED) OTHER SOURCE(S):

The present invention relates to certain substituted oxadiazole, thiadiazole and triazole peptide analogs I (X, Y = independently O, S, (un) substituted N; Z = serine procease binding noiety, Preferably a human neutrophil elastase binding moiety; R! = (un) substituted alkyl, alkenyl, alkylycloalkyl, oxiding noiety), alkylycloalkyl, alkylycloalkyl,

LA ANSVER 32 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

1998:394350 CAPLUS

129:68032

PRIENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

FAMILY ACC. NUM. COUNT:

PATENT FORMATION:

1898:394350 CAPLUS

129:68032

Preparation of oxadiazole peptide analogs as serine protease inhibitors

Gyprkos, Albert, Spruce, Lyle W.

Cortech, Inc., USA: Gyorkos, Albert; Spruce, Lyle W.

COLUMENT TYPE:

English

FAMILY ACC. NUM. COUNT:

18

| P/ | TENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | ٥. | DATE | | | |
|----------|--|-------|-----|------|-----|------------|------|-----|--------------|-------|--------|----------|-----|-------|------|-----|---|
| | 9824 | | | | 2 | 1998 | 0611 | | V | 0 19 | 97-U | 5216 | 36 | 1997 | 1205 | | |
| WC | 9824 | 806 | | A | 3 | 1998 | 1015 | | | | | | | | | | |
| | ¥: | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB. | BG. | BR. | BY. | CA. | CH. | CN. | CIL | ~ | Ε |
| | | UK, | KK, | E5. | FI. | GB. | GE. | GH. | HU. | ID. | 7 T | 15 | .tb | w | 177 | 100 | 1 |
| | | KZ, | uc, | LK, | LR, | LS, | LT. | LU. | LV. | MD. | MG. | MK. | MN. | MZ. | MX. | KO. | |
| | | PL, | PT, | RO, | RU, | SD, | SE. | SG. | SI. | SK. | SL. | T.J. | TM. | TR | TT, | UA. | τ |
| | | UZ, | VN. | YU, | ZV. | AH. | AZ. | BY. | KG. | K2. | MD. | PH | T.T | TM | | | |
| | RW: | GH, | KE, | LS, | MV, | SD, | SZ, | UG, | Z₩, | AT, | BE, | CH, | DE, | DX. | ES, | FI, | P |
| | | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF. | BJ, | CF, | CG, | CI, | CH, | G |
| | | GN, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | | | |
| US | 5801 | 148 | | | | 1998 | 0901 | | U | 5 199 | 96-7 | 7131 | 7 | 1996 | 1206 | | |
| 05 | 5807 | 829 | | ٨ | | 1998 | 0915 | | US | 199 | 96-7 | 5119 | 0 | 1996 | 1206 | | |
| 05 | 2001 | 380 | | A | | 1999 | 0119 | | US | 199 | 96-7 | 5091 | 5 | 1996 | 1206 | | |
| 05 | 2863 | 455 | | ۸ | | 1999 | 0209 | | US | 199 | 36-7 | 5131 | 3 | 1996 | 1206 | | |
| 110 | 2031 | 332 | | • | | 1999 | 2406 | | US | 199 | 96-7 | 5238 | ŧ | 1996 | 1206 | | |
| 03 | 5861 5869 5891 5998 6001 6015 6150 9855 7346 | 319 | | • | | 1999 | 1207 | | US | 199 | 97-9 | 1505 | 5 | 1997 | 1204 | | |
| 05 | 0001 | 811 | | • | | 1999 | 1214 | | US | 199 | 97-91 | 3488 | ı | 1997 | 1204 | | |
| 05 | 0012 | 791 | | • | | 20000 | 2118 | | US | 199 | 7-9 | 488 | ı | 1997 | 1204 | | |
| 811 | 0120 | 334 | | ٨. | | 2000 | 1121 | | US | 199 | 97-91 | 3520 | l . | 1997 | 1204 | | |
| AU | 7346 | | | B2 | ! | 19986 | J629 | | X. | 199 | 98 - 5 | 894 | | 1997 | 1205 | | |
| AU Ph | 9545 | 13 | | | | | | | | | | | | | | | |
| | | | 22 | | | 19991 | 1110 | | E | 199 | 97-9 | 223 | ? | 1997 | 1205 | | |
| | А. | 12, | er, | un, | DE, | DK, FI, | ES, | FR, | GB, | GR, | IT, | LI, | w, | NL, | SE, | KC. | P |
| RD. | 0713 | 504 | 31, | T1: | Lv, | 2000 | KU | | | | | | | | | | |
| JP | 9713 2001 3220 | 50767 | 70 | ÷. | | 20000 | 1528 | | P1 | 199 | 7-13 | 5684 | | 1997 | 1205 | | |
| J.T. | 3220 | 169 | • • | 22 | : | 20010 | 012 | | 31 | 195 | 8-52 | :5656 | • | 1997 | 1205 | | |
| NO | 9902 | 734 | | | • | 19990 | 1022 | | *** | | | | | | | | |
| MX | 9902 | 240 | | • | | 20000 | | | NO | | | | | 1999 | | | |
| US | 20030 | 36041 | а | 21 | | 20030 | 1221 | | MX | 199 | | 8117 | | 1999 | | | |
| LIGRIT | APPI | N I | NFO | . ~. | | 20030 | 1321 | | ıs 19 | | | | | 2001 | | | |
| | | | | • | | | | | | | | | | 1996 | | | |
| | | | | | | | | | S 19 | | | | | 1996 | | | |
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| | | | | | | | | | | | | | | 19961 | | | |
| | | | | | | | | | 5 19 | | | | | 9961 | | | |
| | | | | | | | | | 5 19 | | | | | 9971 | | | |
| | | | | | | | | | 5 19 | | | | | 19971 | | | |
| | | | | | | | | U | S 19 S 19 | y/-9 | 0505 | ь | A : | 19971 | 204 | | |
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L62 ANSWER 32 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

PAGE 1-A

CAPLUS COPYRIGHT 2003 ACS on STN
1998:394349 CAPLUS
129:54608
Inhibitory of interleukin-1.beta. converting enzyme
Golec, Julian M. C.; Lauffer, David J.; Livingston,
David J.; Mullican, Michael D.; Murcko, Mark A.; Nyce,
Philip L.; Robidoux, Andrea L. C.; Vannanaker, Marion
V.

V. Vertex Pharmaceuticals Incorporated, USA; Golec, Julian M. C.; Lauffer, David J.; Livingston, David J.; Mullican, Michael D.; Murcko, Mark A.; Nyce, Philip L.; Robidoux, Andrea L. C.; Vannamaker, Marion V. PCT Int. Appl., 135 pp. CODEN: PIXXD2
Patent PATENT ASSIGNEE (S): SOURCE:

English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PA' | TENT | NO. | | KI | ND | DATE | : | | , | PP! | LIC | I TA | ON N | ٥. | DATE | : | | |
|----------|--------|-------|------|-----|------|-------|-------|-------|------|------|-----|--------------|-------------|-----|------|------|-----|------|
| WO. | 0924 | 005 | | | | | | | - | | | | | | | | | |
| •0 | 9824 | 003 | | ^ | i | 1998 | 0611 | | | 0 | 199 | 17-U | 5222 | 89 | 1997 | 1205 | | |
| | •: | AL, | ۸M, | AT, | ΑU, | λZ, | BA, | BB, | BG, | B | a, | BY, | CA, | CH, | CN, | CU. | CZ. | DE. |
| | | ur. | EE, | ES, | rı, | GB, | GE, | GH, | HU. | 11 | ٥. | IL. | IS. | JP. | KE. | KLZ. | K.D | Y D |
| | | ĸz, | LC, | LK, | LR, | L5, | LT, | LU, | LV. | H. | ٥. | MG. | MK. | MN. | MV. | MX. | NO | N7 |
| | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI. | 51 | ۲. | SL. | TJ. | TM. | TR. | TT | IIA | IIG. |
| | | 05, | UZ, | VN, | YU, | ZV, | λM, | λZ. | BY. | K | ;. | KZ. | MD. | RU. | T.I | TM | | |
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| | | GB, | GR, | IE, | IT. | LU. | MC. | NL. | PT. | SI | ŧ. | RF. | B.T. | CF. | CG, | CI, | ~ ′ | c. |
| | | GN. | ML. | MR. | NE. | SN, | TD. | TG | • | | • | , | ٠., | ٠., | ٠٠, | C1, | cn, | un, |
| AU | 98589 | 960 | | A | 1 | 1998 | 0629 | | | 11 1 | 00 | 0 - E | 0060 | | 1007 | | | |
| EP | 94464 | 15 | | A | i | 1999 | 0929 | | | 9 1 | 00 | 7-01 | 1162 | | 1007 | 1200 | | |
| | R: | AT. | BE. | CH. | DE | מת | PC | Po | ~ | | | ,-,, | ,,,, | ٠ | NL, | 1205 | | |
| | | IR. | PI | , | ъщ, | u., | ш, | ra, | up, | Gr | | 11, | LI, | LU, | NL, | SE, | MC, | PT, |
| JP | 20015 | | | | , | 2001 | 0500 | | | | | | | | | | | |
| 115 | 63703 | 165 | | | | 2001 | 1211 | | | . : | 99 | 0-54 | 2581 | • | 1997 | 1205 | | |
| 115 | 63293 | 1602 | | | | 2001 | 1211 | | U | 5 1 | 99 | 9-32 | 2649 | • | 1999 | 0604 | | |
| 110 | 20030 | 1032 | | | | 2003 | 0410 | | υ | 5 2 | 00 | 1-35 | 850 | | 2001 | 1023 | | |
| 0.5 | 03172 | | | D. | | 2003 | 0603 | | | | | | | | | | | |
| PRIORITY | APPI | AN. 3 | NFO. | : | | | | ι | 3S 1 | 996 | -3 | 2792 | 2P | P | 1996 | 1206 | | |
| | | | | | | | | į | IS 1 | 997 | -4: | 2660 | P | P | 1997 | 0404 | | |
| | | | | | | | | τ | 15 | 997 | -5 | 3001 | IP. | P | 1997 | 0626 | | |
| | | | | | | | | ¥ | ro 1 | 997 | -U: | S22 2 | 289 | v | 1997 | 1205 | | |
| | | | | | | | | T) | 15 1 | 999 | -32 | 2649 | 5 | A3 | 1999 | 1604 | | |
| OTHER SO | URCE (| (5): | | | MARI | PAT 1 | 129:5 | 4 608 | | | | | - | | • | | | |

L62 ANSWER 33 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

108895-98-3

RL: RCT (Reactant): RACT (Reactant or reagent)
(inhibitors of interleukin-1.beta. converting enzyme)
108895-98-3 CAPUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

L62 ANSWER 33 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

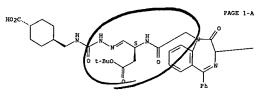
The present invention relates to novel classes of compds. I [RC:CR is an optionally substituted aryl or heteroaryl ring; Rl = aryl, heteroaryl, alkylaryl, alkylheteroaryl; R2 = bond, CO, COCO, SO2, COCO, NECO, NECO, NECO, NECO, CC, EC, R3 = aryl, heteroaryl, cyclealkyl, alkylaryl, alkylheteroaryl; R2 = bond, CO, COCO, SO2, COCO, NECO, NECO, NECO, CC, RC:CRCO, COCKCOO, CHC:CR, S = aryl, beteroaryl, cyclealkyl, alkyl, dialkylanino; Y = RSCO(CR2)mCH2CH(COR6) or related lactones or senicarbacones, where R5 = CH, alkcwy, NEDM, etc.; R6 = H, HOCH2, aroyloxymatchyl, etc.; n = 0 or 1] which were prepd. as inhibitors of interleukin-1-beta. converting enzyme. (ICS). Thus, (35)-3-(3 (R, S)-(benzyloxycarbonyl) amino]-1,3-dihydro-2-oxo-5-phenyl-ZH-1,4-benzodiazepin-1-acetic acid and (35)-3-(1-fluorenylasthoxycarbonylamino)-4-oxobutyric acid tert-Eu ested (35)-3-(1-fluorenylasthoxycarbonylamino)-4-oxobutyric acid tert-Eu ested sincerbazone, showed ICE inhibition const. Ki = 650 mM and ICSO = 20.000 sm.
172968-04-69 20875-98-59

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified) SFN (Synthetic preparation); TEU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(Inhibitors of interleukin-1-beta. converting enzyme)
17296-04-6 ACALUS

17230-04-0 CAPLUS
H-1,4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3[[(phenylnsthoxy)carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 33 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



PAGE 1-B

208759-37-9 CAPLUS

208/95-31-9 CAPLUS ||Hr.|4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3-|[[(phenylmethoxy)carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

208759-60-8 CAPLUS Butannic acid, 4-{ [aminocarbonyl] hydrazono]-3-{{(2,3-dihydro-2-oxo-5-phenyl-3-{[(phenylmethoxy)carbonyl]amino]-1H-1,4-benzodiazepin-1-yl]acetyl]amino]-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

L62 ANSWER 33 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

L62 ANSVER 34 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1598:239206 CAPLUS
128:294794
1,4-Benzodiazepinones and their uses as CCK
antagonists
Sato, Yoshinari, Tabuchi, Seiichiro; Mitsui, Hitoshi,
Katsumi, Ikuyo; Yamanoto, Naoko
Pujisawa Pharmaccutical Co., Ltd., Japan; Nippon
Shokubai Co., Ltd., Sato, Yoshinari; Tabuchi,
Seiichiro; Mitsui, Hitoshi; Katsumi, Ikuyo; Yamanoto,
Naoko PCT Int. Appl., 331 pp. CODEN: PIXXD2 Patent SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE PATENT NO. APPLICATION NO. DATE WO 9815535 A1 19980416 WO 9815535 A1 19980416 WO 1997-JP3463 19970929
W: JP, US
EW: AT, EE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 934282 A1 19990811 EP 1997-941281 19970929
R: AT, EE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, SE, MC, PT,
IE, PI
JP 2001504454 T2 20010403 JP 1998-517372 19970929
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WO 9815535 A1 19980416 WO 1997-JP3463 IS 19970929

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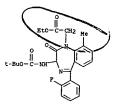
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L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

Benzodiazepine derivs. I [R1 = (un)substituted alkyl; R2 = alkyl or cycloalkylalkyl when R4 = H, or R2 = variety of specified groups when R4 = alkyl, halo, or dialkylamino, R3 = indolyl, (un)substituted arylamino, pyridylamino, or cycloalkylamino) are useful as cholecystokinin (CCK) antagonists. Over 160 examples and numerous intermediates are described. For instance, reaction of 3-MeoCSH4NCO with the corresponding intermediate amine gave title compd. II. In receptor binding studies in vitro, 4 selected I had ICSO values of 1.0-3.7 mM for CCK-B and 0.3-2.0 for CCK-A, with AFB selectivity of 0.30-1.82. The compds. also had IDSO values of 0.23-1.8 mg/kg in a gastric emptying test in mice. 188290-19-19 188290-80-49 188290-81-10-P 205590-85-9 205590-10-99 205590-11-0P 205590-85-9 205590-63-9 205590-11-0P 205590-85-9 205590-63-9 205590-87-09 205590-87-09 205590-87-09 205590-89-20-9 205591-83-99 205591-83-19 205591-82-9 205591-82-9 205591-82-9 205591-82-9 205591-82-9 205591-82-9 205591-82-9 205591-82-9 205591-82-6 205591-82-9 20

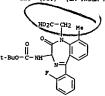
L62 ANSWER 34 OF 10,6 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

188290-80-4 CAPLUS 1H-1,4-Benzodiazepine-1-acetic acid, 3-{[(1,1-dimeth)/elrhoxy) carbonyl}amino]-5-{2-fluorophenyl}-2,3-dihydro-9-methyl-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)



OTHER SOURCE(S):

188290-81-5 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 3-[([1,1-dimethylethoxy)carbomyl]amino]-5-(2-fluorophenyl)-2,3-dihydro-9-methyl-2-oxo-[9CI] (CA INDEX NAME)



188290-82-6 CAPLUS
Carbanic scid, [1-[2-(3-azabicyclo[3.2.2]non-3-yl]-2-oxoethyl]-5-[2-fluorophenyl]-2,3-dlhydro-9-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

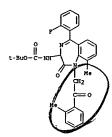
L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 20590-10-9-ckt/US-CN Carbamic soid; [5-(2-fluoropheny1)-2,3-dihydro-9-methyl-2-oxo-1H-1,4benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

RN 205990-11-0 CAPLUS
Carbanic acid, [5-(2-fluorophenyl)-2,3-dibydro-1-[2-(2-methoxyphenyl)-2-oxochyl)-9-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 205990-58-5 CAPLUS
CN Carbanic acid, [5-{2-fluorophenyl}-2,3-dihydro-9-methyl-1-{2-{2-methylphenyl}-2-oxoethyl}-2-oxo-HH-1,4-benzodiazepin-3-yl}-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

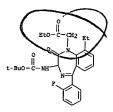


RN 205990-66-5 CAPLUS
CN Carbamic acid, {9-ethyl-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl}-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

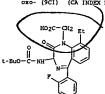
L62 ANSWER 34 OF 106. CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 205990-71-2 CAPLUS
CN 1H-1,4-Benzodiazepine-1-acetic acid, 3-[[(1,1-dimethylethoxy)-carboxyl]amino]-9-ethyl-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

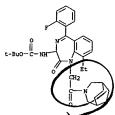


RN 205990-72-3 CAPLUS
CN IH-1,4-Benzodiazepine-1-acetic acid, 3-[[[1,1-dimethy]ethoxy]carbonyl]amino]-9-ethyl-5-[2-fluorophenyl]-2,3-dihydro-2-oxo- (9CI) (CA INDEX NAME)



FN 205990-73-4 CAPLUS
CN Carbanic acid, {1-{2-(3-azabicyclo[3.2.2]non-3-y1)-2-oxoethyl}-9-ethyl-5(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-y1]-,
1,1-dinethylethyl ester (SCI) (CA INDEX RAME)

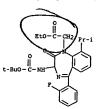
L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



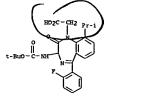
RN 205990-82-5 CAPLUS
CN Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-9-(1-methylethyl)-2-oxo-1H1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



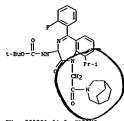
RN 205990-87-0 CAPLUS
CN 1H-1,4-Benzodiazepine-1-acetic acid, 3-[[(1,1-dimethyletboxylcarbonyl)anino]-5-(2-fluorophenyl)-2,3-dihydro-9-(1-methyletbyl)-2-oxo-, ethyl ester (9Cl) (CA INDEX NAME)



EN 205990-88-1 CAPLUS CN IH-1, 4-Benzodiazepine-1-acetic acid, 3-[[(1,1-dinethylethoxy) carbonyl]amino]-5-{2-fluorophenyl}-2, 3-dihydro-9-(1-methylethyl)-2-cxo- (9CI) (CA INDEX NAME) L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

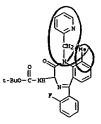


205990-89-2 CAPLUS
Carbanic acid, [1-[2-(3-azabicyclo[3.2.2]non-3-yl)-2-oxoethyl]-5-(2-fluorophenyl)-2,3-dihydro-9-(1-nethylethyl)-2-oxo-1H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester {9Cl} (CA INDEX NAME)

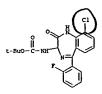


205991-64-6 CAPTUS
Carbanic acid, [5-(2-fluorophenyl]-2,3-dihydro-9-methyl-2-oxo-1-{2-pyridinylnethyl]-1H-1,4-benzodiazepin-3-yl]-, 1,1-dinethylethyl ester
(9C1) (CA INDEX NAME)

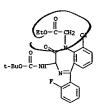
L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



205991-82-8 CAPLUS
Carbanic acid, [9-chloro-5-(2-fluoropheny1)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-y1]-, 1,1-dimethylethyl ester [9CI] (CA INDEX NAME)



205991-83-9 CAPLUS IH-1,4-Benzodiazepine-1-acetic acid, 9-chloro-3-{{{1,1-dienzodiazepine-1-acetic acid, 9-chloro-3-{{1,1-dienzodiazepine-1-acetic acid, 9-chloro-3-{{1,1-dienzodiazepine-2-oxo-, ethyl ester (9Cl} (CA INDEX NAME)

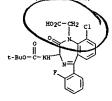


L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

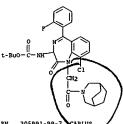
205991-85-1 CAPLUS

IH-1, 4-Benzodiazepine-1-acetic acid, 9-chloro-3-{[(1,1-dimethylethoxy)carbonyl]amino]-5-(2-fluorophenyl)-2, 3-dihydro-2-oxo-(9CI)

(CA_INDEX_NAME)

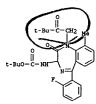


205991-86-2 CAPLUS Carbanic acid, [1-[2-(3-azabicyclo[3.2.2]non-3-yl)-2-oxoethyl]-9-chloro-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-IH-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

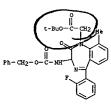


205991-99-7 CAPLUS
Carbanic acid, Na.(2)3-dimethyl-2-oxobutyl)-5-(2-fluorophenyl)-2,3-dihydro-9-methyl-2-oxob-H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

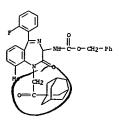
L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



205992-37-6 CAPLUS IH-1,4-Benzodiazepine-1-acetic acid, 5-{2-fluorophenyl}-2,3-dihydro-9-methyl-2-oxo-3-[[(phenylmethoxy)carbonyl]amino}-, 1,1-dimethylethyl ester (SCI) (CA INDEX NAME)



205992-39-8 CAPLUS Carbanic acid, [5-(2-fluorophenyl]-2,3-dihydro-9-methyl-2-oxo-1-(2-oxo-2-tricyclo[3,3.1.13,7]dec-1-ylethyl]-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)



ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 205992-84-3 CAPLUS Carbanic acid, [5-{2-fluorophenyl}-2,3-dihydro-9-methyl-2-oxo-1-{2-oxopropyl}-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester [9CI] (CA INDEX NAME)

205992-95-6 CAPLUS
Carbanic acid, [5-{2-fluoropheny1}-2,3-dihydro-9-methy1-1-{2-{3-intropheny1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxoctby1}-2-oxocby1}-2

205996-26-5 CAPLUS 1H-1, 4-Benzodiarepine-1-acetic acid, 5-(2-fluorophenyl)-2, 3-dihydro-9-methyl-2-oxo-5-f[(phenylmethoxy)carbonyl}amino]-, ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 34 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

205996-27-6 CAPLUS
1H-1,4-Benzodiazepine-l-acetic acid, 5-{2-fluorophenyl}-2,3-dibydro-9-methyl-2-oxo-3-[{(phenylnethoxy)carbonyl}amino}- (9CI) (CA INDEX NAME)

(Continued)

205990-17-6P
RL: ROT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of benzodiazepinones as CCK antagonists)
205990-17-6 CAPLUS
Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-9-methyl-1-[2-(2-nitrophenyl)-2-oxoethyl]-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

ANSWER 35 OF 106 CAPLUS COPYRIGHT 2003 ACS ON STN CCESSION NUMBER: 1998:126655 CAPLUS DOCUMENT NUMBER: 128:192666

TITLE:

139:120636
Preparation of acetamides, their use as chymase inhibitors and angiotensin II inhibitors, and cardiovascular agents containing them Akaha, Atsushi; Takenaka, Kohei; Itani, Hiromichi; Sato, Akihiro; Nakanishi, Isao
Fujisawa Pharmaceutical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JXXXAF

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

Japanese

LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

JP 10053579 A2 19980224
PRIORITY APPLN. INFO.:
OTHER SOURCE(5): MARROW APPLICATION NO. DATE JP 1997-160803 19970618 AU 1996-626 MARPAT 128:192666

RINEXYCONHCHR2COR3 I [R] = H, protecting group; R2 = ar(lower)alkyl; R3 = lower haloalkyl, (protected) CO2H; X = Q1, Q2; R4, R5 = halo-, lower alkoxy-, or Ph-substituted aryl, cyclo(lower)alkyl; R6 = H, lower alkyl; Z = N, CH; Y = lower alkylene) or their salts, useful for prevention or treatment of heart and/or circulation disorders, are prept, by oxido. of RABREXYCONHCHR2CHR3CHR] (R1a = protecting group; R2, R3, X, Y = same as above) or their salts, followed by optional deprotection. Oxido. of 90 above) or their salts, followed by optional deprotection. Oxido. of 90 above) or their salts, followed by optional deprotection. Oxido. of 90 above) or their salts, followed by optional deprotection. Oxido. of 90 above) or their salts, followed by optional deprotection. Oxido. of 90 above) or their salts, followed by optional deprotection. Oxido. of 90 above 1.1, 1.-triactoxy-1.-jo-dihydro-1.2-benziodoxol-1-(HB)-one at room temp. for 15 h in CH2C12 gave 644 ag the corresponding ketone deriv., which inhibited chysase at 1C50 of <1.0. times. 10-5 H.
201437-89-09 203437-80-39 203457-91-49
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); RCT (Reactant); SFN

ANSVER 35 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREF (Preparation): RACT (Reactant or reagent): USES (Uses) (prepn. of acetamides as chymase and angiotensia II inhibitors) 203457-89-0 CAPLUS Carbanic actd, [2,3-dihydro-2-cxo-1-[2-cxo-2-[(3,3,3-trifluoro-2-cxo-1-(phenylmethyl)propyl)amino]ethyl]-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

203457-90-3 CAPLUS
Carbanic acid, [2,3-dihydro-2-cxo-1-[2-cxo-2-[{3,3,4,4,4-pentafluoro-2-cxo-1-(phenylnathyl)butyl]anino]ethyl]-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

203457-91-4 CAPLUS
Carbanic acid, (5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1-{2-oxo-2-[{3,3,3-trifluoro-2-oxo-1-(phenylnethyl)propyl]amino|ethyl}-1H-1,4-benrodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 35 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

203457-83-4 CAPLUS
Carbamic acid, [5-{2-fluoropheny1}-2,3-dihydro-2-oxo-1-[2-oxo-2-[{3,3,3-trifluoro-2-hydroxy-1-{phenylmathy1}propy1}amino|ethy1]-1H-1,4-benzodiazepin-3-y1}-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 35 OF 106 CAPLUS COPYRIGHT 2003 ACS OR STN (Continued)

203457-81-2P 203457-82-3P 203457-83-4P
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. of acetanides as chymase and angiotensin II inhibitors)
203457-81-2 CAPUS
Carbanic acid, [2,3-dihydro-2-oxo-1-[2-oxo-2-[{3,3,3-trifluoro-2-hydroxy-1-(phenylnethyl)propyl]amino]ethyl]-5-phenyl-IH-1,4-benzodiazepin-3-yl]-,
phenylmethyl ester (SCI) (CA INDEX NAME) IT

203457-82-3 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-1-{2-oxo-2-[{3,3,4,4,4-pentafluoro-2-hydroxy-1-(phenylaethyl)butyl]anino|ethyl]-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylnethyl ester (9CI) (CA INDEX NAME)

COMENT NUMBER:

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

ANSWER 36 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

ESSION NUMBER: 1998:117724 CAPLUS

Steric control of reactivity: formation of oximes,

HOR(S): Steric control of reactivity: formation of oximes,

Heaney, Frances: Bourke, Sharon: Cunningham, Desmond;

McArdie, Fatrick

Department of Chemistry, University College Galway,

Ire.

Journal of the Chemistry, University College Galway,

Ire.

Journal of the Chemistry (1998), (3), 547-560

CODEN: JCFKEN; ISSN: 0300-9580

Royal Society of Chemistry

Journal

SUAGE: Royal Society of Chemistry

Journal

SUAGE: Steric Of Steric Of

172558-27-49 203917-54-8P
REL: RCT (Reactant): SFN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(formation of oximes, benzodiazepinone N-oxides and
isoxazoloquinolinones from alkenoylaminophenylcarbonyl compds.)
172658-27-4 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-, ethyl
ester, 4-oxide (9CI) (CA INDEX NAME)

203917-54-8 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-7-nitro-2-oxo-5-phenyl-, ethyl ester, 4-oxide (9CI) (CA INDEX NAME)

L62 ANSWER 36 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
17 203917-53-7P
RL: SFN (Synthetic preparation); PREP (Preparation)
(fornation of oxines, benzodiazepinone N-oxides and
isoxazoloquinolinones from alkenoylaminophenylcarbonyl compds.)
RN 203917-53-7 CAPLUS
CN 1H-1,4-Benzodiazepina-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-,
ethyl ester, 4-oxide (SCI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 21

L62 ANSWER 37 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

The title compds. [I; A = thieno, pyrido, (un)substituted benzo; X = 0, S, N(NH2), N(OH), H2; Y = 0, N(CN), H2; Z = (un)substituted C1-6 alkylene, C2-4 alkenylene, C3-6 cycloalkylene, etc., p = 0-2; R1 = (un)substituted Ph. C5-7 cycloalkyl, 5-10 membered heterocyclyl, etc.; R2 = (un)substituted Ph. C5-7 cycloalkyl, 5-10, C5-7 cycloalkyl, etc.; R3 = H, (un)substituted Ph. C1-4 alkyl, C73; R4 = H, (un)substituted C1-6 alkyl, cransparent C1-5-yl; R5 = H, O; R2R5 = II], useful as selective IKs antagonists, were prepd. Thus, reaction of (g)-3-phenyl-2-propencyl chloride with 3(R)-amino-1,3-dihydro-1-sethyl-5-phenyl-2-propencyl chloride with presence of E1N in CH2C12 afforded 21k the title compd. (g)-(-)-(R)-III. C0mpds. I have an IC50 of < 100 mH as IKs blockers and are at least 10 times more potent in the blockade of IKs than of blocked of IKr. Method of preventing, treating, terminating and protecting against cardiac arrhythmias such as atrial, supraventricular and ventricular arrhythmias resulting from myocardial ischemic injury in a patient in need thereof, comprising administration of a selective IKs antagonist and a beta-adrenergic receptor blocking agent, administered in combined therapy either simultaneously, sep. or sequentially is presented. Addial., a pharmaceutical prepn. comprising a selective IKs antagonist and a beta-adrenergic receptor blocking agent, wherein these compds. are administered simultaneously, sep. or sequentially is presented. Addial.; a pharmaceutical prepn. comprising a selective IKs antagonist and abeta-adrenergic receptor blocking agent, wherein these compds. are administered simultaneously, sep. or sequentially is presented. New Marchael and School and Scho

L62 ANSWER 37 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:55621 CAPLUS
DOCUMENT NUMBER: 128:128038
TITLE: Preparation of benzodiazepines

128:128038
Preparation of benzodiazepines as selective IKs antagonists
Lynch, Joseph J., Jr.; Salata, Joseph J.
Herck + Co., Inc., USA; Lynch, Joseph J., Jr.; Salata, Joseph J.
PCT Int. Appl., 202 pp.
CODEN: PIXKD2
Patent
English
1 INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|----------------------|---------------------|---------------------|-----------------|
| | | | |
| WO 9800405 | A1 19980108 | WD 1997-US11131 | 19970625 |
| V: AL, AM, | AU, AZ, BA, BB, BG, | BR, BY, CA, CN, CU, | CZ, RE, GE, HU, |
| 11, 15, | JP, KG, KR, KZ, LC, | LK. LR. LT. LV. MD. | MG. MY. MY MY |
| NO, NZ, | PL, RO, RU, SG, SI, | SK. SL. TJ. TH. TD | 77 IIA IIC 177 |
| VN. YU. | AM, AZ, BY, KG, KZ, | MD DI TI TH | 11, UK, US, UZ, |
| RW: GH. KR. | LS, MW, SD, SZ, UG, | 727 NO. 10, IN | |
| CB CD | 15, 14, 35, 32, 00, | ZW, AI, BE, CH, DE, | DK, ES, FI, FR, |
| GD, GR, | IE, IT, LU, MC, NL, | PT, SE, BF, BJ, CF, | CG, CI, CM, GA, |
| ON, HL, | MR, NE, SN, TD, TG | | |
| AU 9735066 | A1 19980121 | AU 1997-35066 | 19970625 |
| AU 722110 | B2 20000720 | | |
| EP 907644 | A1 19990414 | EP 1997-931437 | 19970625 |
| R: AT, BE, | CH. DE. DK. ES. FR. | GB. GR. 17. LT 111 | MI CP DP TP OT |
| JP 2000510155 | T2 20000808 | TD 1000-504200 | 10070635 |
| PRIORITY APPLN. INFO | | OF 1990-504289 | 19970625 |
| THE O | | US 1996-20747P P | 19960628 |
| | | GB 1996-17894 A | |
| | | ♥O 1997-US11131 ₩ | 19970625 |
| OTHER SOURCE(S): | MARPAT 128:1280 | 38 | |

L62 ANSWER 37 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

170284-32-9 CAPLUS
Carbanic acid, [(3R)-2,3-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

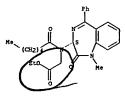
170551-99-2 CAPLUS
Carbamic acid, [(3R)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmathyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

170284-54-5P 201789-22-2P 170244-54-59 201789-22-29
RE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepa. of benzodiazepines as selective IXs antagonists)
170284-54-5 CAPLUS
Glycine, N- (AS)-2, 3-dihydro-1-methyl-2-oxo-5-phenyl-HH-1, 4-benzodiazepin-3-yl]-N-(1-oxohexyl)-, ethyl ester (SCI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L62 ANSWER 37 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



201789-22-2 CAPLUS Glycine, N-(3-cyclohexyl-1-oxopropyl)-N-(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, ethyl ester (9CI) (CA INDEX NAME)

ΙT

108895-98-3
RL: RCT (Reactant): RACT (Reactant or reagent)
(prepn. of benzodiazepines as selective IKs antagonists)
108895-98-3 CAPLUS
Carbanic acid, (2.3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (SCI) (CA INDEX NAME)

Ex 65

201988-64-9P

L62 ANSWER 38 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:42387 CAPLUS
DOCUMENT NUMBER: 128:102106
TITLE: Preparation of benzodiazepines (

INVENTOR (S):

PATENT ASSIGNEE (S):

Preparation of benzodiazepines for treating Meniere's disease Siegl, Peter K. S.; Goldberg, Allan I.; Goldberg, Michael R.; Chang, Paul I. Merck + Co., Inc., USA; Siegl, Peter K. S.; Goldberg, Allan I.; Goldberg, Michael R.; Chang, Paul I. PCT Int. Appl., 193 pp. CODEN: PIXXD2
Patent SOURCE:

DOCUMENT TYPE: LANGUAGE:

Patent English 1

LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

| PATENT | NO. | KIND | DATE | | APPLI | CATION N | ο. | DATE | | |
|--------------|---------|---------|----------|-------|---------|----------|-----|----------|-----|-----|
| | | | | | | | | | | |
| WO 9749 | 690 | A1 | 19971231 | | WO 19 | 97-US105 | 61 | 19970623 | | |
| | | | BA, BB, | | | | | | | HU. |
| | IL, IS, | JP. KG. | KR, KZ, | LC. I | K. I.R. | LT. LV. | MD. | MG. MK | MN | MX |
| | NO. NZ. | PL. RO. | RU, SG, | SI. S | K. SL. | TJ. TM. | TR. | TT. IIA | 115 | 117 |
| | VN. YU. | AM. AZ. | BY, KG, | KZ. M | D. RU. | TJ. TM | , | ,, | ٠., | · |
| RW: | GH. KE. | LS. MW. | SD, SZ, | UG. 2 | W. AT. | BE. CH. | DR. | DK. ES | PT | WD. |
| | GB. GR. | IE. IT. | LU, MC, | NL. P | T. SE. | BF. BJ. | CF. | CG. CI | CH. | GA, |
| | GN. ML. | MR. NE. | SN, TD, | TG | .,, | 2., 20, | ٠., | 00, 01, | ٠., | un, |
| AU 9734 | | | 19980114 | | AII 19 | 97~34007 | | 10070623 | | |
| PRIORITY APP | | | | | | | | 19960627 | | |
| | | | | | | | | | | |
| | | | | | | 17895 | | | | |
| | | | | US | 1997- | 10796P | P | 19970314 | | |
| | | | | WO | 1997- | JS10561 | ¥ | 19970623 | | |
| OTHER SOURCE | (5): | MAR | PAT 128: | | | | | | | |

Page 49

162 ANSWER 37 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 3-y1]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Ex 98

REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AISVER 38 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
The title compds. [I: A = (un) substituted thieno, pyrido, benzo: X = 0, S, N(HIZ), N(GH), H2) Y = 0, N(GN), H2; Z = (un) substituted C1-6 alkylene, C2-6 alkenylene, a single bond, etc.; p = 0-1; R1 = (un) substituted Ph, C5-7 cycloalkyl, Re, etc.; R2 = (un) substituted Ph, C5-7 cycloalkyl, C4-4 alkyl, etc.; R3 = H, C1-6 alkyl, C73; R4 = H, C1-6 alkyl, tetrazol-5-yl; R5 = H, O, RSR2 = II], useful for the treatment of Heniere's disease comprising the administration of a medicament which modulates the IKs channel of the ear and thereby reduces endolymph prodn., were prepd. Thus, reaction of (E)-3-phenyl-2-propencyl chloride with 3(R)-amino-1,3-dihydro-1-methyl-5-phenyl-2-H-1,4-benodiazepin-2-one in the presence of Et3N in CH2C12 afforded 21% the title compd. (E)-(+)-(3R)-III. Compds. I showed ICSO of < 100 nM as IKs blockers.

170284-32-99 170551-99-29
RL: BAC (Biological activity or effector, except adverse); BSU (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPR (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of benzodiazepines for treating Meniere's disease) 170284-32-9 CAPLUS
Carbamic acid. [(3R)-2,3-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

170551-99-2 CAPLUS
Carbamic acid, [43R)-2,3-dibydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

| 146135-15-1P 170284-51-2P 170284-54-5P | RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); TBU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of benzodiazepines for treating Meniere's disease) | 146135-15-1 CAPLUS | Carbamic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-,

L62 ANSWER 38 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN phenylmethyl ester (9CI) (CA INDEX NAME) (Continued)

170284-51-2 CAPLUS Glycine, N-(3-cyclohexyl-1-oxopropyl)-N-(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

170284-54-5 CAPLUS
Glycine, N-[(3S)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-N-(1-oxohexyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 170284-72-79

ACPLUS COPYRIGHT 2003 ACS on STN
ACPLSSION NUMBER:
1997:123309 CAPLUS
126:225281
10:04ENT NUMBER:
126:225281
10:11 Dual CCK-A and -B receptor antagonists. I.
CS-Methyl-1, 4-benzodiazepines
AUTHOR(S):
Tabuchi, Selichiror Ito, Harunobus Sogabe, Hajimer,
Kuno, Masakor Katausi, Ikuyor Yamamoto, Naokor Mitsui,
Hitoshi's Satch, Yoshinari
New Drug Research Laboratories, Fujisawa
Pharmaceutical Co., Ltd., Osaka, 532, Japan
Bioorganic & Medicinal Chemistry Letters (1997), 7(2),
169-174
COURN: MMCLE8, ISSN: 0960-894X

CODEN: EMCLE8; ISSN: 0960-894X Elsevier

PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI Journal English

A novel series of potent CCK-A and CCK-B dual antagonists has been prepd. which incorporate a Me substituent at the 9 position of a 1,4-bencodiazepine ring system. FR193108 (*)-1) was selected for further biol. evaluation, and is expected to be more efficacious than CCK-A selective antagonists for the treatment of pancreatitis, since it has high and well-balanced affioities for both CCK-A and -B receptors.

188290-79-1P 188290-80-4P 188290-81-5P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and CCK-A and -B receptor antagonist activity of methylbencodiazepines)
188290-79-1 CAPLUS
Carbanic actd, [5-(2-fluorophenyl)-2,3-dihydro-9-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

1

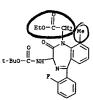
L62 ANSWER 38 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
R1: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of benrodiazepines for treating Meniere's disease)
RN 170284-72-7 CAPLUS
CN Glycine, N-(2,3-dihydro-1-nethyl-2-oxo-5-phenyl-1H-1,4-benrodiazepin-3-yl), ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

L62 ANSWER 39 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



188290-80-4 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 3-{{(1,1-dimethylethoxy) carbonyl}amino]-5-{2-fluorophenyl}-2,3-dihydro-9-methyl-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)



188290-81-5 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 3-[[(1,1-dinethylethoxy)carbonyl]amino]-5-(2-fluorophenyl)-2,3-dihydro-9-methyl-2-oxo- (9CI) (CA INDEX NAME)



188290-82-6 CAPLUS

Carbanic acid, [1-[2-(3-azabicyclo[3.2.2]non-3-y1)-2-oxoethyl]-5-(2-fluorophenyl)-2,3-dihydro-9-methyl-2-oxo-iH-1,4-benzodiazepin-3-y1)-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 39 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

ANSWER 40 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
186086-59-9P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(1.4-benzodiszepin-3-ylureas as gastrin/CCK-B antagonists)
108985-89-3 CAPLUS
Carbamic acid, (2.3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiszepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

152665-63-9 CAPLUS
Carbamic acid, [1-[3,3-dimethyl-2-oxobutyl)-2,3-dihydro-2-oxo-5-phenyl-lH1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

152665-84-4 CAPIJIS 15/cbb-84-4 CAPUS Carbamic acid, [2,3-dihydro-2-oxo-5-[2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

186086-59-9 CAPLUS Carbanic acid, [1-(3,3-dimethyl-2-oxobutyl)-2,3-dihydro-2-oxo-5-(2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (NDEX NAME)

Page 51

L60 ANSVER 40 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCOSTON NUMBER: 1997:41882 CAPLUS TITLE: 126:117956 (3R).14-(1-(tert-Euty)carbonylmet 1997:11882 CAPUS

[38].-N-[1-(tert-Butylcarbonylnethyl)-2,3-dihydro-2-oxo-5-(2-pyridyl)-1H-1,4-benzodiazepin-3-yl)-N'-[3-(nethylamino)phenyl]urea (Yf476): A Potent and Orally Active Gastrin/CKA-B Antagonist
Semple, Graems; Ryder, Hamish; Rooker, David P.; Batt, Andrzej R.; Kendrick, David A.; Szelke, Michael; Ohta, Mitsuaki; Satoh, Masazov Nishida, Aktico Akurawa, Shinobu; Miyata, Keiji
Ferring Research Institute, Chilworth Research Centre, Chilworth/Southampton, Solfo TNP, UK
Journal of Medicinal Chemistry (1997), 40(3), 331-341

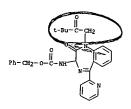
CODEN: JMCMAR; ISSN: 0022-2623
American Chemical Society AUTHOR (5): CORPORATE SOURCE: SOURCE: PUBLISHER: DOCUMENT TYPE: LANGUAGE:

I

A no. of new 1,4-benzodiarepin-2-one-based gastrin/CCK-B receptor antagonists related to the archetypal analog L-365,260, and more closely to the recently reported compd. YMO22, have been synthesized and evaluated for biol. activity. The compds. were screened for their ability to inhibit the binding of [125][CCK-B to gastrin/CCK-B receptors prepd. from rat brains and that of [3M]L-364,718 to CCK-A receptors from rat pancreas, and were shown to be potent and selective liquands for the gastrin/CCK-B receptor. Functional studies in vivo demonstrated the compds. to be antagonists of the receptor as evidenced by their ability to inhibit pentagastrin-induced gastric acid secretion in anesthatized rats. More extensive evaluation in vivo included deta. of EDSO values in the rat acid secretion model for selected compds. and an examn. of the effect of these compds. on pentagastrin-induced gastric acid secretion in Heidenhain pouch dogs following oral and i.v. administration. Two compds., namely [3R]-I dose-dependent effects in both models with the former showing excellent coral biogavallability and a EDSO of 21 nmol/kg po in dogs. YF476 is currently under clin. investigation for the treatment of gastro-esophagal reflux disease. IT

L62 ANSWER 40 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)



OCHENT NUMBER:

ANSWER 41 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 1996:457956 CAPLUS 125:123701

125:123701
Antihypertriqlyceridenic composition
Sugiyama, Yasuo; Yukinasa, Hidefumi
Takeda Chemical Industries, Ltd., Japan
Can. Pat. Appl., 59 pp.
COURN: CTXXEB
Fatent PATENT ASSIGNEE (S):

DOCUMENT TYPE: LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

CA 2160092 AA 19960108 CA 1995-2160092 19951006

PRIORITY APPIM. INFO.: 1994-199494 19941007

OTHER SOURCE(S): HARFAT 125:127701

GI For diagram(s), see printed CA 199ue.

AB An antihypertriglyceridenic compn. comprises a compd. I (R1 = H, hydrocarbon group , R2, R3 = H, hydrocarbon, group, heterocyclic group; X = carboxyl group, carbamoyl group, OH, amino group, heterocyclic group; A = benzene ring, beterocyclic ring; J = 7 - or 8 -membered heterocyclic ring; or a pharmacol. acceptable salt thereof. The compn. has a plasmatriglyceride conc.—lowering activity, and therefore is useful for the prophylaxis or treatment of hypolipemia, such as hypertriglyceridecina. Examples for formulating capsules, tablets, and injections contg. I are given.

16595-80-7
RI: EAC (Biological activity or effector, except adverse); BSU (Biological study); USES (Uses)

(hypolipemic compns. contg. fused-cyclic compds.) 165952-80-7 CAPLUS

18352-80-7 (AFUS)
18-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-(2-methylpropyl)-2-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
177783-97-0P 177783-98-1P 177783-99-2P
177784-01-9P 177784-03-1P 177784-09-TP
177784-31-3P 177784-45-1P 177784-27-9P
177784-31-5P 177784-45-1P 177784-47-3P
177784-60-0P 177784-61-1P 177784-62-2P
177784-64-P 177784-61-1P 177784-62-2P
177784-64-P 177784-91-7P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); PACT (Reactant or reagent) (prepn. of oxobenzodiazepinylureas as CCK and gastrin antagonists)
103373-52-0 CAPLUS
Carbamic acid, [5-[2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

168162-29-6 CAPLUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

177553-82-1 CAPLUS
Carbamic acid, [5-[2-fluorophenyl]-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 177783-92-5 CAPLUS

Page 52

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMEER: 1996:365469 CAPLUS
DOCUMENT NUMEER: 125:33652
Freparation of oxobenzodiazepinylureas as CCK and gastrin antagonists
Sato, Yooshinari: Sakane, Kazuo; Tabuchi, Seiichiro; Mitsui, Hitoshi; Katsumi, Ikuyo; Satoh, Yuichi Pujissay Pharnaceutical Co., Ltd., Japan; Nippon Shokubal Co., Ltd.
PCT Int. Appl., 302 pp.
COUMENT TYPE: LANGUAGE: PANILLY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|------------------------|-------------|-------------------------|--------------|
| * | | | |
| WO 9604254 | A2 19960215 | WO 1995-JP1497 | 19950727 |
| WO 9604254 | A3 19960620 | | 15550121 |
| ♥: CA, CN, | | | |
| | | FR, GB, GR, IE, IT, LU | MC 107 DT CD |
| CA 2196062 | AA 19960215 | CA 1995-2196062 | 10050727 |
| EP 804425 | A2 19971105 | | |
| R: AT. BK. | | FR, GB, GR, IT, LI, LU, | 13320151 |
| JP 10504545 | T2 19980506 | JP 1995-506388 | |
| US 5763437 | A 19980609 | US 1997-776196 | 19950727 |
| PRIORITY APPLN. INFO. | | | 19970129 |
| THEOLETT REPLACE THEO. | • | GB 1994-15311 | 19940729 |
| | | GB 1995-1726 | 19950130 |
| | | WO 1995-JP1497 | 19950727 |

OTHER SOURCE(S): MARPAT 125:33692

Title compds. [I; R = C(:Y)ZR2; R1 = (un)substituted aryl, (un)substituted cycloalkyl, R2 = (un)substituted aryl, (un)substituted cycloalkyl, etc.; R5 = Z1R3; R3 = tetrahydrofuryl, thienyl, quinolyl, XR4, etc.; R4 = thiomorpholinyl, pyridyl, cyclohydrocarbyl, etc.; X = C0, C02, COMH, etc.; Y = 0 or S; Z = bond, (alkyl)imino; Z1 = alkylenel were prepd. Thus, I (R1 = C6HF-Z) (II; R = C02CHZPR, R5 = CHZCOZH) (prepn. given) was amidated by 3-azabicyclo(3.2.2)nonane and the deprotected product N-acylated by 3-MeCGHMCO to give II [R = COMHCGHMe-3, R5 = CHZCOZH, R4 = 3-azabicyclo(3.2.2)nonan-3-yl) which gave 98.0% inhibition of CCK-8 binding at guinea pig cerebral cortex membrane prepn. at 10-8M in vitro. 103373-52-09 168162-22-68 17753-92-19

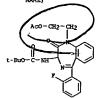
L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN 1H-1,4-Benzodiazepine-1-acetic acid, 5-(2-fluorophenyl)-2,3-dihydro-2-oxo3-{{(phenylmethoxy)carbonyl}amino}-, methyl ester (9CI) (CA INDEX NAME)

177783-93-6 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 5-(2-fluorophenyl)-2,3-dihydro-2-oxo-3-[[(phenylaethoxy)carbonyl]amino]- (9CI) (CA INDEX NAME)

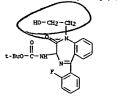
177783-94-7 CAPLUS Carbanic acid, [1-[2-(3-azabicyclo[3.2.2]non-3-y1)-2-oxoethyl]-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-y1}-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 177783-97-0 CAPLUS
CN Carbanic acid, [1-[2-(acetyloxy)ethyl]-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-lH-1,4-benrodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



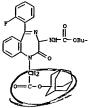
FN 177783-98-1 CAPLUS
CN Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-1-{2-hydroxyethyl}-2-oxo-1H1,4-benzodiazepin-3-yl}-, 1,1-dimathylethyl ester (9CI) (CA INDEX NAME)



RN 177783-99-2 CAPLUS
CN 3-Azabicyclo[3.2.2]nonane-3-carboxylic acid, 2-[3-[{[1,1-diasthyletoxy]carboxyl]amino]-5-[2-fluorophenyl]-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-1-yl]ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

FN 177784-01-9 CAPIUS
CN 1H-1,4-Benzodiazepine-1-acetic acid, 3-[[(1,1-dinethylethoxy)carbonyl]amino]-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-, tricyclo[3.3.1.13,7]dec-1-yl ester (9CI) (CA INDEX NAME)

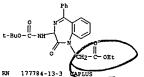


RN 177784-03-1 CAPLUS
CN 1H-1,4-Benzodiazepine-1-acetic acid, 3-{[(1,1-diset)lethoxy|carbonyi]amino]-5-(2-fluoropheny1)-2,3-dihydro-2-oxo-, ethyl ester (9CI) (CA INDEX NAME)

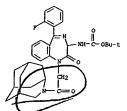
L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 177784-09-7 CAPLUS
CN 1H-1,4-Benzodiazepine-l-acetic acid, 3-[[(1,1-dimethylethoxyl carbonyl]amino]-2,3-dihydro-2-oxo-5-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 177784-13-3 APIUS
CN Carbanic acid, [1=72-[4-azatricyclo(4.3.1.13,0]undec-4-yl)-2-oxoethyl]-5(2-fluorophenyl)-2,3-dibydro-2-oxo-H-1,4-benzodiazepin-3-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

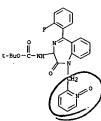


RN 17784-25-7 CAPLUS
CN Carbanic acid, [1-[(2-acetyl-3-thienyl)nethyl]-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

P N N CH2

RN 177784-27-9 CAPLUS
Carbamic acid, [5-{2-fluorophenyl}-2,3-dihydro-1-[(1-oxido-2-pyridinyl]nethyl]-2-oxo-1H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 177784-31-5 CAPLUS
CN Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1-[[3-(1-pyrrolidinylcarbonyl)-2-pyridinyl]nethyl]-1H-1,4-benzodiazepin-3-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 17778-46-1 CAPLUS

CN 3-Pyridinearboxylic acid, 2-[{3-[[(1,1-dimethylethoxy)carboxyl]amino]-5(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-1-yl]methyl}-,
methyl ester (9CI) (CA INDEX NAME)

RN 177784-47-3 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-{{3-{{(1,1-dimethylethoxy)carbonyl]amino}-5(2-fluorophenyl)-2,3-dihydro-2-oxo-lH-1,4-benzodiazepin-1-yl]methyl}(9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

FN 177784-48-4 CAPLUS
CN Carbanic acid, [1-{[3-{aninocarbonyl]-2-pyridinyl]nethyl]-5-{2-fluorophenyl}-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, 1,1-dinethylethyl ester (SCI) (CA INDEX NAME)

RN 177784-50-8 CAPLUS
Carbanic acid, [1-[[2-(dimethylamino)ethyl]amino]carbonyl]-2pyridinyl]methyl]-5-[2-fluorophenyl]-2, 3-dihydro-2-oxo-H-1,4benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 177784-58-6 CAPLUS
CN Carbamic acid, [1-{(3-acetyl-2-pyridinyl)methyl}-5-(2-fluorophenyl)-2,3-dibydro-2-oxo-H-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 177784-60-0 CAPLUS
CN Carbanic acid, [1-{2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl)-,
1,1-dinethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

RN 177784-61-1 CAPLUS
CN Carbanic acid, [1-{2-aminoethyl}-5-{2-fluorophenyl}-2,3-dihydro-2-oxo-lH-1,4-benzodiazepin-3-yl}-, 1,1-dimethylethyl ester {9CI} (CA INDEX NAME)

RN 177784-62-2 CAPLUS
CN Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1-[2-{(3-pyridinylcarbonyl)anino|ethyl]-1H-1,4-benzodiazepin-3-yl}-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

177784-64 CAPUS
Carbanic abids [1-{(5-acetyl-2-furanyl)methyl}-5-(2-fluorophenyl)-2,3-dibydro-2.oxo-lH-1,4-benzodiazepin-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

2-Thiophenecarboxylic acid, 5-[[3-[[1,1-dimethylethoxy)carbonyl]amino]-5-(2-fluorophenyl)-2, 3-dihydro-2-oxo-1H-1, 4-benzodiazepin-1-yl}methyl]-, methyl ester (9CI) (CA NNDEX NAME)

L62 ANSWER 42 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

L62 ANSWER 43 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1996:353193 CAPLUS DOCUMENT NUMBER: 125:33694 TITLE: Prancasian Prancas 125:33694
Preparation of benzodiazepines as cholecystokinin B antagonists
Sato, Yoshinari; Sakane, Kazuo; Mitsui, Hitoshi; Katsumi, Ikuyo; Sato, Juichi
Fujisawa Pharmaceutical Co, Japan; Nippon Catalytic Chem Ind
Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JOKKAF
Patent INVENTOR (5): PATENT ASSIGNEE (S): SOURCE: DOCUMENT TYPE: P.
LANGUAGE: J.
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: Japanese

KIND DATE APPLICATION NO. DATE JP 08073444 A2 19960319
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 125.3 JP 1994-210012 JP 1994-210012 MARPAT 125:33694

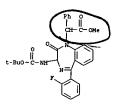
The title compds. I (R1, R2 = (un)substituted aryl; R3 = alkylthioalkyl, etc.] are prepd. N-[(3RS)-2,3-Dihydro-1-(2-methylthioethyl)-5-(2-fluorophenyl)-2-oxo-1H-1,4-benzodiazepin-3-yl)-N'-(3-methylphenyl)urea (NRR data given) in vitro at 1 x 10-6 M gave 98.5% inhibition of [1251] CCC-8 binding to cerebral cortex membranes.

177553-82-19 177553-83-87-6P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of benzodiazepines as cholecystokinin B antagonists)

177553-82-1 CAPIUS
Carbanic acid, [5-(2-fluorophenyl)-2, 3-dihydro-2-oxo-1H-1,4-benzodiazepin-.3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Page 55

L62 ANSWER 43 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RN 177553-83-2 CAPLUS
CN 1H-1,4-Denzodiazepine-1-acetic acid, 3-[{1,1-dimethylethoxyl_arbonyl]anino|-5-{2-fluorophenyl}-2,3-dihydro-2-oxo-alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



177553-87-6 CAPLUS
2-Butenoic acid, 4-[3-[{(1,1-dimethylethoxy)carbonyl]amino]-5-{2-fluorophenyl)-2,3-dihydro-2-oxo-HF-1,4-benzodiazepin-1-yl]-3-phenyl-, ethyl ester, (E)- (SCI) (CA INDEX NAME)

Double bond geometry as shown.

L62 ANSWER 44 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1996:184016 CAPLUS
124:233140
171TLE:
124:233140
171TLE:
17TLE:
17TLE

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|-----------------------|---------------------|-------------------------|-----------------|
| | | ********* | |
| VO 9532191 | A1 19951130 | WO 1995-US6286 | 19950516 |
| w: Am, AU, | BB, BG, BR, BY, CA, | CN. CZ. RE. PI. GR. | HIL IS ID WO |
| KR, K2, | LK. LR. LT. LV. MD. | MG, MN, MX, NO, NZ, | B' DO DU CO |
| SI. SK. | TJ, TH, TT, UA, US, | 10, 11, 11, 10, 10, 11, | FL, KU, KU, SG, |
| TW- FF MU | 50, 1n, 11, 0A, 03, | 02 | |
| noi ku, no, | 3D, 32, 0G, AT, BE, | CH, DE, DK, ES, FR, | GB, GR, IE, IT. |
| ν, nc, | NL, PI, SE, EF, BJ. | CF, CG, CI, CM, GA, | GN. ML. MR. NP |
| 311, 111, | 16 | | |
| CA 2190846 | AA 19951130 | CA 1995-2190846 | 10050516 |
| AU 9525176 | A1 10051210 | AU 1995-25176 | 19930316 |
| ATT 691290 | B2 19980514 | VO 1332-521 /P | 19950516 |
| ED 3(0012 | P5 13380214 | | |
| EP /60813 | A1 19970312 | EP 1995-919234 | 19950516 |
| K: AI, BE, | CH. DE. DK. ES. FR. | GR. GR IF IT IT | 711 MY NO ON |
| JP 10500688 | T2 19980120 | JP 1995-530425 | 100, 11, 11, 35 |
| US 5753650 | A 10000510 | US 1996-737191 | 13320216 |
| PRICEITY APPLY THE | 1 13300313 | 02 1336-131131 | 19961106 |
| PRIORITY APPLN. INFO. | • • | US 1994-247122 | 19940520 |
| | , | TO 1995-IISK286 | 19950516 |
| OTHER SOURCE(S): | MARPAT 124:2331 | 10 | |

The title compds., 3-(L-cysteinylamino)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepine derivs. [1; R1 = H, Cl-4 alkyl: R2 = H, (un)substituted Cl-4 alkyl; C3-6 cycloalkyl, heterocyclyl, or aryl: R3 - R5 = H, Cl-4 alkyl, halo: provided that R2 = H when R3 is other than H; R6 = Cl-4 alkyl, aralkyl: X = O, H2] or pharmaceutically acceptable salts or

L62 ANSWER 44 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

14098-39-6 Carlos acid, [2,3-dihydro-1-{4-methoxyphenyl}methyl]-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

174698-40-9 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 44 OF 106 CAPLUS COPYRIGHT 2003 ACS on STM (Continued) disulfides thereof, which inhibit farnesyl-protein transferase (Flase) and the farnesylation of the concepen protein Ras, and block the shiltry of Ras to transform normal cells to cancer cells, are prepd. The invention is further directed to chemotherapeutic compus. Conty. the compds. I and mathods for inhibiting farnesyl-protein transferase and treatment of cancer. Thus, alkylation of 2.3-dihydro-2-oxo-HR-14-benzodiazepine (III; R = R6 = H) by 4-methodybenzyl chloride in the presence of KZGO3 in DMF at 60.degree. overnight to II (R = 4-methoxybenzyl, R1 = H) followed by treatment with potassium bis furinachylsiyl) and in tolluen-fiff at -78.degree. and azidation with 2.4.6-triisopropylebranesulfonyl chloride at -78.degree. and azidation with 2.4.6-triisopropylebranezyl R1 = N3). Redn. of the latter middle with Ph3P in aq. THF at room temp. overnight to the anine II (R - 4-methoxybenzyl, R1 = N3). Redn. of the latter middle with Ph3P in aq. THF at room temp. worling the benzyl chloreformate in the presence of 4-dinachylaninopyridine and disopropylethylanine in CHZC12 at room temp. and mathylation with HeI in the presence of sodium bis (trimethylailyl) anide in THF at -78.degree. for 1 h and at room temp. for 2 h gave II (R = 4-methoxybenzyl, R1 = NHE) followed by condensation with the state in a mixt. of H20 and MeCN to II (R = H, R1 = NHEOXCHZPh) and treatment with a mixt. of H30 HBF/ACCH and CHZC12 at room temp. for 2 h to II.RBF (R = H, R1 = NHBM) followed by condensation with N-tert-butoxycarboryl-5-trityl-1-crysteine in the presence of disopropylethylanine and bis (2-oxo-3-oxazoldidnyl) phosphinic chloride in CHZC12 at 0.degree. overnight gave the precursor II (R = H, R1 = BGO-Cyy-(Tri)-NHBW; wherein Tri * trityl-1, which was treated with CY3COZH in CHZC12 to give, after purifn. by HPLC using a C-18 Vydac protein-peptide column, each one of the pure disaterecens II.1.25CF3COZH (R = H, R1 = H-Cyy-NHB+). The latter faster and slower eluting di

(Reactant or reagent) SYM (Synthetic preparation); PREP (Preparation); (Reactant or reagent) (prepn. of (cysteinylamino)dihydrooxobenzodiazepine derivs. as inhibitors of farnesyl-protein transferase and anticancer agents) 108895-98-3 CAPLUS

108895-98-3 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

174698-38-5 CAPLUS

Carbamic acid, [2,3-dihydro-1-[(4-methoxyphenyl)methyl]-2-oxo-5-phenyl-1H-

L62 ANSWER 45 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:161143 CAPLUS
DOCUMENT NUMBER: 124:232494
TITLE: Preparation of diazepine derivatives as specific inhibitors of human renin lehibitors of human renin

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT INCORPATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 07304755 A2 19951121 JP 1994-98481 19940512

PRIORITY APPLN. INFO.: JP 1994-98481 19940512

OTHER SOURCE(S): MARPAT 124:232434

GI For diagram(s), see printed CA Issue.

AB The title compdo. (Ir ring A = (un)substituted benzene or thiophene; R1 = H, alkyl, or aralkyl; R2 = alkyl, aralkyl, (un)substituted Ph; II = bond, alkyl- or aralkyl-substituted alkylene; X = bond, CO, NHCO; R3 = aralkyl, cycloalkylalkyl; L2 = (CHOHI) n, CONMCHHS; n = 1,2; wherein R5 = aralkyl, cycloalkylalkyl; Y = Het, CH2-Het, CH2S-Het, CO2R4; wherein Het = (un)substituted 3 - to S-membered heterocyclyl contp. 1-4 N atoms; R4 = H, alkyl, which have lasting effect and excellent absorbability through digestive treat, and are suitable for clin. administration and useful for the treatment and prevention of hypertension, in particular renin-angiotensin dependent hypertension (no data), are prepd. Thus, 133 mg (3R)-3-amino-1-methyl-5-phenyl-2, 3-dihydro-1H-benzodiazepin-2-one was dissolved in CH2C12; followed by adding 0.15 mL ELTN and carbonyldiimidazole, stirring the resulting mixt at room temp. for 1 h, and adding a soln of 322 mg (1S)-1-cyclohexylnethyl-2-hydroxy-3-(11-methyl-5-tetrazolyl) thiolpropylamine hydrochloride and 0.31 mL ELTN in CH2C12; and the resulting mixt was stirred at room temp. for 2 h to give, after silica gel chromatog., the title compd. (II).

IT 14399-16-79 174399-10-97 174399-20-19

174399-22-49 174399-23-59 174399-23-69

174399-22-49 174399-30-98 174399-30-99

RI: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of peptide-contg. diazepine derivs. as specific inhibitors of human renin)

NN 174399-16-7 CAPLUS

NA Absolute stereochemistry.

Absolute stereochemistry.

L62 ANSWER 45 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

174399-19-0 CAPLUS H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-, phenylmethyl ester, (R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

174399-20-3 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-, (5)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

174399-21-4 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-, (R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 45 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

174399-26-9 CAPLUS HF-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-1-methy1-2-oxo-5-pheny1-, ethyl ester (9C1) (CA INDEX NAME)

174399-28-1 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-1-methyl-2-oxo-5-phenyl-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

174399-29-2 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-1-methyl-2-oxo-5-phenyl-, phenylmethyl ester, (5)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Page 57

L62 ANSWER 45 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

174399-22-5 CAPLUS 1H-1,4-Benzodiszepine-3-acetic acid, 2,3-dihydro-1-methyl-2-ozo-5-phenyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

174399-23-6 CAPLUS IH-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-1-methyl-2-oxo-5-phenyl-(SCI) (CA INDEX NAME)

174399-24-7 CAPLUS IH-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 45 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

174399-30-5 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-1-methyl-2-oxo-5-phenyl-, (5)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

174399-35-0 CAPLUS 1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-1-methyl-2-oxo-.beta.,5-diphenyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

174399-36-1 CAPLUS 1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-1-methyl-2-oxo-.beta.,5-diphenyl- (9CI) (CA INDEX NAME)

MENT NUMBER:



NSVER 46 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
100 NUMBER: 1996:95894 CAPLUS
NT NUMBER: 124:261001
A facile large scale synthesis of optically active
3-amino-5-(2-pyridyl)-1,4-benzodiazepin-2-one
derivatives derivatives

AUTHOR (S): Semple, Graeme: Ryder, Hamish: Ohta, Mitsuaki: Satoh,

Pagato Ferring Research Inst., Chilworth Research Centre, Southampton, Solf 7NP, UK Synthetic Communications (1996), 26(4), 721-7 COMEM: SYNCAV, ISSN: 0039-7911 CORPORATE SOURCE:

SOURCE:

PUBLI SHER Dekker

DOCUMENT TYPE: LANGUAGE: English

A facile mathod for the synthesis of 3-amino-5-(2-pyridyl)-1,4-benzodiazepin-2-one I mediated by benzotriazole is described. The synthesis and optical resoln. of the product by fractional crystn. proceeds in high yield, under mild conditions and without recourse to toxic reagents or chromatog, sepns. and hence is amenable to the large scale prepn. of these important precursors to potent CCK receptor ligands. ISB162-20-79 169162-21-69 RE. RCT (Reactant) SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of aminopyridylbenzodiazepinone) 169162-20-7 CAPUS Carbamic acid, (2,3-dihydro-2-oxo-5-(2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 47 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1996: 45260 CAPLUS DOCUMENT NUMBER: 124:13933
TITLE: Synthesis and Accession and Acc

124:219383
Synthesis and biological activity of
1-alkylcarbonylmethyl analogs of YMO22
Semple, Graemer Ryder, Hamish: Kendrick, David A.;
Szelke, Michael: Ohta, Mitsuski: Satch, Masato;
Nishida, Akito: Akuzawa, Shinobu; Miyata, Keiji
Ferring Res. Inst., Chilworth Res. Centre,
Southampton, SO16 7NP, UK
Bioorganic & Hedicinal Chemistry Letters (1996), 6(1),
51-4
CODEN: EMCLE8; ISSN: 0960-894X
Elsevier AUTHOR (S):

CORPORATE SOURCE:

SOURCE:

Elsevier

DOCUMENT TYPE: LANGUAGE:

J.SHER: Elsevier

MENT TYPE: Journal

NAGE: English

A novel series of 1-alkylcarbonylmethyl analogs of the potent
gastrin/CCX-B receptor antagonist YMO22 have been prepd. A no. of analogs
retained good affinity for the gastrin/CCX-B receptor and one compd. (6d)
showed improved binding and enhanced selectivity for this receptor over
CCX-A. A second compd. (J) gave improved in vivo inhibition of gastric
acid secretion in rats. Both analogs were shown to have significantly
better activity in the same model following i.d. dosing than either YMO22
or L-365,260.
174589-30-1

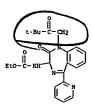
RL: RCT (Reactant), RACT (Reactant or reagent)
(alkylcarbonylmethyl analogs of YMO22 prepn. and structure-related
affinity for gastrin/CCX-B receptor and gastric acid secretion
inhibition)
174589-30-1 CAPLUS
Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester, (R)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 46 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

168162-21-8 CAPLUS Carbanic acid, [1-(3,3-dimethyl-2-oxobutyl)-2,3-dihydro-2-oxo-5-(2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, ethyl ester (9CI) (CA INDEX NAME)



22 ANSWER 48 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN CESSION NUMBER: 1995:998140 CAPLUS OCUMENT NUMBER: 124:176161 DOCUME TITLE:

INVENTOR (S):

124:176:61
Preparation of 1,4-benzodiazepin-2-one-1-acetamides as cholecystokinin-A receptor agonists Aquino, Christopher Josephr Bezube, Milana: Sugg, Elizabeth Ellen: Sherrill, Ronald George: Willson, Timothy Mark: Szewczyk, Jerzy Ryszard Glawo Welleome Inc., USA PCT Int. Appl., 121 pp. CODEN: PIXXD2

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

SN, TD, TG

AU 9524462 A1 19951110 AU 1995-24462 19950413
EP 755394 A1 19970129 EP 1995-91854 19950413
FR: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 09511998 T2 19971202 JP 1995-526594 19950413
ZA 9503111 A 19960123 ZA 1995-3111 19950418
US 5795887 A 19980818 US 1996-718552 19961011
RITY APPLN. INFO.:

GB 1994-7469 19940415
GB 1994-20699 19941014
GB 1994-20699 19941014 PRIORITY APPLN. INFO.: GB 1994-20702 1995-EP1335 1994101

MARPAT 124:176161 OTHER SOURCE(S):

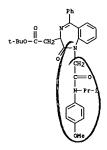
L62 ANSWER 48 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

AB Title compds. [1] R = (CH2) n(NH)p(CO)q(NH)rR3; R1 = (cyclo)alkyl,
 (un)substituted Phr R2 = (cyclo)alkyl, (un)substituted Phr alkenyl, etc.;
 NRIR2 = tetrahydroquinolyl, substituted benzazepinyl; R3 = H, =
 (cyclo)alkyl, (un)substituted Phr, alkenyl; R3 = H, = k1kyl, alkoxy,
 etc.; R6 = (CH2)aRS; R5 = H, = (cyclo)alkyl, (un)substituted Phr, alkenyl, etc.; R7 = H, alkyl, alkoxy,
 etc.; R7 = (COZH, etc.; R7 = H, ESR) = O; R8 = H, (un)substituted alkyl, NH2,
 COZH, etc.; R7 HS = bond; R9,R10 = H or halo; a,n = 0-3; p,q,r, = 0 or 1]
 were prepd. Thus, 3-benzyloxycarbonylamino-5-(3-pyridyl)-13 dihydrobenzo[e][1,4]diazepin-2-one was N-alkylated by
 BrCHZCON(CH82[CH6](CM)=(4) (prepn. jiven) and the deprotected product
 condensed with PhNCO to give title compd. II (R4 = NHCONHH), R5 =
 3-pyridyl). II (R4 = Hh-indazol-3-ylanethyl, R5 = 2-pyridyl) (prepn. not
 given) gave 100% inhibition of guines pig gall bladder segment contraction
 at 30, mL.M in vitro and 2.5% rat gastric emptying at 0.1nol/ky i.p.
 108895-98-3P 171459-55-7P 173459-55-8P
 173454-06-9P 173659-07-4P
 RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of 1.4-benzodiazepin-2-one-1-acetamides as cholecystokinin-A
 receptor agonists)
 NO 10895-98-3 CAPUMS
 Carbamic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
 phenylnethyl ester (9CI) (CA INDEX NAME)

173459-42-2 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-1,5-diphenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, [R-(R*,5*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 48 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



173459-56-8 CAPLUS HH-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-1-[2-[(4-methoxyphenyl)(1-methylethyl)amino]-2-oxoethyl]-2-oxo-5-phenyl- (9CI) (CA INDEX NAME)

173654-06-3 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-1,5-diphenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, {R-{R*,R*}}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 48 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN Carbanic acid, [2,3-dihydro-1-[2-{(1-methyletbyl)phenylamino]-2-oxoethyl]2-oxo-5-phenyl-1H-1,4-bencodiazepin-3-yl]-, 1-phenylethyl ester,
[R-(R*,5*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

173459-46-6 CAPIJS
Carbanic acid, [2,3-dihydro-1-[2-[(1-methylethyl)phenylamino]-2-oxoethyl]-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

173459-55-7 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-1-{2-{4-methoxyphenyl} (1-methylethyl) aniol-2-coxoethyl]-2-oxo-5-phenyl-, 1,1-dimethylethyl ester (SCI) (CA INDEX MAME)

L62 ANSWER 48 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

173654-07-4 CAPLUS 17364-07-4 CAPLUS (2,3-dihydro-1-[2-[(1-methylethyl)phenylamino]-2-oxoethyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, 1-phenylethyl ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

(Continued)

Absolute stereochemistry.



ANSWER 49 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1995:995049 CAPLUS 1995:995049 CAPLUS 124:118002

124:118002
Preparation of phosphotyrosine-containing peptides as inhibitors of SR2 domain interactions of protein Bachovchin, Villian V.
Trustees of Tufts University, USA
PCT int. Appl., 95 pp.
CODEN: PIXXD2

INVENTOR (S): PATENT ASSIGNEE (S): SOURCE:

English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATERT NO. KIND DATE APPLICATION NO. DATE WO 9525118 WO 9525118 A2 19950921 A3 19951116 WO 1995-US3225 19950315

VO 9525118 A2 19950921 VO 1995-US3225 19950315
VO 9525118 A3 19951116
V: CA, JP

W: CA, JP

W: AT, EE, CH, DE, DE, ES, FR, GB, GR, JE, IT, LU, MC, ML, PT, SE
US 5580979 A 19961203 US 1994-214643 19940315
PRICRITY APPLN. INFO:
US 1994-214643 19940315
OTHER SOURCE(S):
OTHER SOURCE(S):
MARPAT 124:118002
GI For diagram(s), see printed CA Issue
alkyl, hydroxyalkyl, alkoxyalkyl, CDZH, NHZ, amide, nitroxyl, SH,
sulfonyl, sulfonamide; ring A = 4-8 atoms-conty, fused ring selected from
an (un) substituted cycloalkyl, cycloalkenyl, aryl, or heterocyclyl; RH, RE
= H, halo, alkyl, alkenyl, alkynyl, CDZH, NHZ, amide, nitroxyl, SH,
alkoxyalkyl, alkenyloxyalkyl, (CH2)nGCHEN)A, GCH2)mAR, (CH2)mGH,
alkoxyalkyl, alkenyloxyalkyl, (CH2)nGCH2)mAR, (CH2)mCONRARS, (CH2)
AHC(INH)NHZ, alkenylalkyl, etc., RZ = electron lone pair, H, alkyl,
alkenyl, alkynyl, COZH, (CH2)mAR, (CH2)cONRARS, (CH2)mCONRARS, (CH2)pS(GH2)mAR, (CH2)pS(H), alkenylalkyl, etc., RZ = electron lone pair, H, alkyl,
(CH2)pS(GH2)mAR, (CH2)pHRARS, (CH2)pCONRARS, (CH2)p NHC(INH)NHZ,
alkanylalkyl, etc., RZ = anino acid or peptide residue; wherein RA, RS =
H, alkyl, alkenyl, (CH2)mAR, anino acid or peptide residue; wherein RA, RS =
H, alkyl, alkenyl, (CH2)mR, alkancyl, alkencyl, CO(CH2)mR7; or NRARS =
heterocyclyl conty, 4-8 atoms; R7 = aryl, cycloalkyl, cycloalkyn,
heterocyclyl; n, n = 0-6; p = 1-6; R13 = H, alkyl; R14 = absent, halo,
alkyl, alkoxy, alkylthio, NO2, CF3, cyano, CH3; Pared. These peptidominetics
can selectively bind to a phosphotyrosine binding site of an SH2 domain
and inhibit binding of protein conty, said SH2-conty,
protein is selected from Src, Lck, Fps, hopsphatidylinosicol-3-kinases,
ras GTPase-activating protein, Fyn, Lyk, Fgs, Fes, ZAP-70, Abl, etc. In
particular, peptidyldiazepines inhibit intracellular signaling pathway for
oncogene or a cytokine, or a growth factor and modulate a function of said
oncogene or a diod. activity of said cytokine or growth factor. Said
peptidominetics inhibit a tyrosine kinase or phosphatace. Thus,
PhCH202CNGCH(SCH92)c

ANSWER 49 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) [{(phenylmethoxy)carbonyl]amino}- (9CI) (CA INDEX NAME)

172968-05-7 CAPhys L-Isoleucine, N-{ [2-2-dihydro-2-oxo-5-phenyl-3-[[(phenylmethoxy|carbonyl]amino]-1H-1,4-benzodiazepin-1-yl]acetyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry

L62 ANSWER 49 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) overnight to give the benzodiazepinone deriv. (III: R18 = H. R19 = NRCO2CH2Ph), which was treated with NaH in IMF and alkylated by Et bromoacetate to give III (R18 = EUDZCH2, R19 = NRCOZCH2Ph). This compd. vas sapond. with NaCH in aq. dioxane to the acid III (R18 = HOZCCH2, R19 = NRCOZCH2Ph), which was condensed with H:11e-ORe using NRCOZCH2 and N-mathylmorpholine in THF to give III (R18 = CHZCO-11e-ORe, R19 = NRCOZCH2Ph). The latter compd. was hydrogenolyzed in the presence of 101 Pd-C under H atm. in MeOH to the anine III (R18 = CHZCO-11e-ORe, R19 = NRZ), which was condensed with Fnoc-Tyr(P(0) (OMe)2]-OH using NRCOZCCI and N-mathylmorpholine in THF to give III (R18 = CHZCO-11e-ORe, R19 = Pnoc-Tyr(P(0) (OMe)2]-HI] and treated with bromotrinethylsilane in CHZC12 conty. isobutylene to give the title compd. III (R18 - CHZCO-11e-ORe, R19 = Pnoc-Tyr(P(0) (GH2)2-NH] (IV). In the IDEXX ick-SH2 binding assay using a glutathione-S-transferare (SST)/SH2 fusion protein, IV inhibited the binding of fluorescein isothiocyanate (FITC)-labeled peptide EPGYEEIPIYL with ICSO of 65.2 .mu.H.

IT 108893-89-39 INSTANST-SS-OP 172968-04-69
IT2868-035-IP R487-SS-OP 172968-04-69
IRCCT (Reactant), SFN (Synthetic preparation); PREF (Preparation); RACT

172568-05-79
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preps. of phosphotyrosine-contg. peptide mimetics as inhibitors of SH2 domain interactions of protein)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

119487-58-0 CAPLUS 1H-1,4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3-[[(phenylmethoxy)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

172968-04-6 CAPLUS 1H-1,4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3-

LO ANSWER 50 OF 106 CAPLUS COPYRIGHT 2003 ACS ON STN
1995:926107 CAPLUS
100UMENT NUMBER: 123:340198 TITLE:

123:340198
Preparation of antiarrhythmic imidazo[1,4]benzodiazepines
Bock, Mark G.; Dipardo, Robert M.; Freidinger, Roger M.; Baldwin, John J.; Remy, David C. Herck and Co., Inc., USA
PCT Int. Appl., 39 pp.
CODEN: PIXXD2
Patent
FRONLigh INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: E
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9514472 A1 19950601 WO 1994-US13442 19941121

W: AM, AU, BB, BC, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SI, SK, TJ, TI, AU, US, UZ

RW: KE, HW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, 1E, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, HL, MR, NE, SN, TD, TG

US 5439906 A 19950808 US 1993-155672 19931122

CA 2176022 AA 19950601 CA 1994-2176022 19931122

AU 9512924 A1 19950613 AU 1005 A 19950808 US 1993-155672 19931122
AA 19950601 CA 1994-2176022 19941121
AI 19950613 AU 1995-12924 19941121
AI 19960911 EF 1995-904107 19941121
EE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MI, PT, SE
T2 19970114 JF 1994-515174 19941121
AI 19960822 AU 1996-56043 19960618
BZ 19971120
INFO: R: AT, JP 09500392 AU 9656043 AU 683797 US 1993-155672 US 1993-156210 WO 1994-US13442 MARPAT 123:340198 PRIORITY APPLN. INFO.:

OTHER SOURCE (5):

The title compds. [1: A = (un)substituted C2-3 alkylene or alkenylene: R = (un)substituted Ph, C5-6 cycloalkyl; R1 = substituted PhNHZ, (un)substituted indolylamino, etc.], useful as antiarrhythmics (no data), are prepd. Thus, N-[(4R,45)-6-phenyl-2,4-dihydro-1H-finidazo[1,2-a][1,4]benzodiazepin-4-yl]-N'-(3-mathylphenyl)urea, n.p. 147.degree. [decompn.], was prepd. from ethanolamine.

RL: RCT (Reactant); RACT (Reactant or reagent)

L62 ANSWER 50 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

(prepn. of antiarrhythmic imidazo[1,4]benzodiazepines from)

RN 146135-15-1 CAPLUS

CN Carbanic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-,
phenylnethyl ester (9CI) (CA INDEX NAME)

170227-96-0P 170228-05-4P
RL: RCT (Reactant). SPN (Synthetic preparation), PREP (Preparation), RACT
(Reactant or reagent)
(Grepn. of antiarrhythmic imidazo[1,4]benzodiazepines from)
170227-96-0 CAPLUS
Carbanic acid, [2-[(2-hydroxy-1-methylethyl)amino]-5-phenyl-3H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester, [R-(R*,5*)]- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

170228-05-4 CAPLUS Carbanic acid, [2-{(2-hydroxy-1-methylethyl)amino}-5-phenyl-3H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester, [5-{R*,R*}]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 51 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:916464 CAPLUS
DOCUMENT NUMBER: 123:340199
TITLE: Preparation of N-benzodiazepinylamides as antiarrhythmics
INVENTOR(S): Baldwin, John J. Claremon, David A. / Elliott, Jason H. / Liverton, Nigel, Remy, David C. / Selnick, Harold G.

G. Merck and Co., Inc., USA PCT Int. Appl., 177 pp. CODEN: PIXXD2 Patent English PATENT ASSIGNEE (S):

DOCUMENT TYPE:

| FAMILY ACC. | NUM. COU | | | | | | | | | | | | |
|--------------|-----------|---------|--|------|-------|------|-------|------|-----|---------|------|-----|-----|
| PATENT INFOR | MATION: | | | | | | | | | | | | |
| PATENT | NO. | KIND | DATE | | API | PLIC | ATI | ON N | ٥. | DATE | | | |
| | | | 19950601 | | WO | 199 | 4 - U | 5134 | 14 | 1994 | 1121 | | |
| W: | AM, AU, | BB, BG, | BR, BY, | CA, | CN, (| CZ. | EE. | FI. | GE. | HU. | JP. | KG. | KR. |
| | KZ, LK, | LR, LT, | LV, MD, | MG, | MN, 1 | NO. | NZ. | PL, | RO. | RU. | SI. | SK. | TJ. |
| | TT, UA, | US, UZ | | | | | | | | | | | |
| R₩: | KE, MW, | SD, SZ, | AT, BE, | CH, | DE, I | DK, | ES, | FR, | GB, | GR, | IE, | IT. | LU. |
| | MC, NL, | PT, SE, | BF, BJ, | CF, | CG, C | CI, | CM, | GA, | GN, | ML, | MR, | NE. | SN. |
| | TD. TG | | | | | | | | | | | | |
| US 5426 | 185 | Α | 19950620 | | US | 199 | 3-15 | 633 | 1 | 1993 | 1122 | | |
| CA 2176 | 015 | AA | 19950620 19950601 19950613 19980806 | | CA | 199 | 4-2 | 760 | 15 | 1994 | 1121 | | |
| AU 9511 | 005 | A1 | 19950613 | | AU | 199 | 5-13 | 1005 | | 1994 | 1121 | | |
| AU 6951 | 59 | B2 | 19980806 | | | | | | | | | | |
| EP /304 | 54 | A1 | 19960911 | | EP | 199 | 5-90 | 1959 | 5 | 1994 | 1121 | | |
| R: | AT, BE, | CH, DE, | DK, ES, | FR, | GB, C | R, | ΙE, | IT, | LI, | LU, | NL, | PT, | SE |
| CN 1142 | 184 | A. | 19970205 | | CN | 199 | 4-19 | 4856 | 5 | 1994 | 1121 | | |
| CN 1074 | 926 | В | 19970205 20011121 19970228 19970603 19970812 20000131 | | | | | | | | | | |
| TD 0010 | | A2 | 19970228 | | HU | 199 | 6-13 | 372 | | 1994 | 1121 | | |
| JP 0950 | 5598 | TZ | 19970603 | | JP | 199 | 4-51 | 5169 | • | 1994 | 1121 | | |
| DK 3400 | 140 | A | 19970812 | | BR | 199 | 4-81 | 48 | | 1994 | 1121 | | |
| PL 1770 | 10 | B1 | 20000131 | | PL | 199 | 4-31 | 4592 | : | 1994 | 1121 | | |
| CV 2015 | 30 | A. | 20000728 20010409 | | NZ | 199 | 4-32 | 8938 | | 1994 | 1121 | | |
| JR 2015. | 126 | 20 | 20010409 | | SK | 199 | 6-65 | | | 1994 | 1121 | | |
| DI 2155 | 507 | DZ | 20011009 | | JP | 199 | 5-51 | 5169 | ! | 1994 | 1121 | | |
| 115 5595 | 200 | | 20000910 19970121 19960521 19960719 19970220 | | KU | 199 | 0-11 | 3042 | | 1994 | 1122 | | |
| PT 9602 | 141 | î | 19970121 | | 05 | 199 | 2-41 | 1240 | , | 19950 | 1327 | | |
| NO 9602 | 359 | î | 10060710 | | FI | 100 | 6-21 | - 1 | | 13300 | 1521 | | |
| LV 1152 | 5 | R | 19970220 | | IV | 100 | 6-20 | 23 | | 19360 | 1521 | | |
| PRIORITY APP | IN. INFO. | , ~ | 133.0220 | 124 | 100 | 3-1 | 5623 | 1 | | 10021 | 1322 | | |
| PRIORITY APP | | | | 114 | 199 | 3-1 | 5610 | • | | 10071 | 122 | | |
| | | | | N' | 199 | 4-2 | 7664 | - | ٠, | 10041 | 122 | | |
| | | | | | 199 | | | | | | | | |
| OTHER SOURCE | (S): | MAR | PAT 123:3 | 4019 | , ,,, | - 0. | | •• | • | .,,,,,, | 121 | | |

170284-32-9 CAPLUS Carbanic acid, [(3R)-2,3-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

FN 170284-51-2 CAPLUS

L62 ANSWER 50 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

L62 ANSWER 51 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

Title compds. [I; A = atoms to complete a thiophene, pyridine, or (un) substituted benzene ring; R1 = Me, (un) substituted Ph, cycloalky1, heterocycly1, etc.; R2 = (cycloalky1, (un) substituted Ph, fury1, etc.; R3 = H, alky1, CF3, etc.; R3 = H, o.) R2R5 = 1,2-C6H4CO; R6 = H, R5R6 = bond; X = H2, O, S, NOH, NNH2; Y = H2, O, NCN; Z = bond, alk(en)ylene, (C12) my(C12)n, etc.; V = O, S, NH s, n, n = 0-4] were prepd. Thus, (R3-3-amino-1,3-dihydro-1-methy1-5-phenyl-2H-1,4-benzodiazepin-2-one was amidated by (E)-PACH:CHCOC1 to give title compd. II. I had IC50 of <1000nM as IKs and IKr blockers in an in vitro test. 146135-15-119 10284-32-29F 10264-51-2P 170284-54-5P 170551-99-2P R2R: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRRF (Preparation); USES (Uses) (prepn. of N-benzodiazepinylamides as antiarrhythmics) 146135-15-1 CAPLUS Carbamic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

Page 61

ANSWER 51 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) Glycine, N-(3-cyclohexyl-1-cxcpropyl)-N-(2,3-dihydro-1-methyl-2-cxco-5-phenyl-1H-1,4-benzodiarepin-3-yl)-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

170284-54-5 CAPUS Glycine, N-[(3S)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-N-(1-oxohexyl)-, ethyl ester (9Cl) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

170551-99-2 CAPLUS

Carbanic acid, [(3R)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L62 ANSWER 52 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:913348 CAPLUS
DOCUMENT NUMBER: 122:340197
TITLE: Preparation of imidazobenzodiazepinylureas as cholecystokinin B antagonists
INVENTOR(S): Bock, Mark G.; Freidinger, Roger M.; Dipardo, Robert M. INVENTOR(S):

PATENT ASSIGNEE(S):

M.
Merck and Co., Inc., USA
PCT Int. Appl., 43 pp.
CODEN: PIXXD2
Patent
English
2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. US 1993-156210 US 1993-155672 WO 1994-US13325 MARPAT 123:340197 19931122 19941118

OTHER SOURCE(S):

Title compds. [I: A = [alkyl(oxycarbonyl)]alk(en)ylene: R = cycloalkyl, (un)substituted Ph: Rl = (hetero)arylaminol were prepd. as cholecystokinin B antagonists (no data). Thus, (R,S)-N-(2,3-dihydro-2-thioxo-5-phenyl-IH-1,4-benzodiazepin-3-yl)-N' - (3-methylphenyl)urea was condensed with (S)-2-amino-1-propanol and the product cyclized to give N-{(2S,4R)- and -(2S,4S)-2-methyl-6-phenyl-2,4-dihydro-1H-imidazo[1,2-a][1,4]benzodiazepin-4-yl]-N' - (3-methylphenyl)urea.

Page 62

L62 ANSWER 51 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

170284-64-7P 170284-72-7P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. of N-benzodiazepinylamides as antiarrhythmics)
170284-64-7 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

170284-72-7 CAPLUS
Glycine, N-{2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl}-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

ANSWER 52 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 146135-15-1 (Continued)

146135-15-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of imidazobenzodiazepinylureas as cholecystokinin B
antagonists)
146135-15-1 CAPLUS
Carbamic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

IT

170227-96-0P 170228-05-4P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of imidazobenzodiazepinylureas as cholecystokinin B antagonists)
170227-96-0 CAPLUS
Carbamic acid, (2-[(2-hydroxy-1-methylethyl)amino]-5-phenyl-3H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester, [R-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry,

170228-05-4 CAPLUS

Carbanic acid, [2-[(2-hydroxy-1-methylethyl)amino]-5-phenyl-3H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX

Absolute stereochemistry.

L62 ANSWER 52 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 53 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

ANSWER 53 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

Title compds. [I A = atoms to complete an (un) substituted 5- or 6-membered ring contg. .itoreq.1 addnl. N or 0 atoms; R1 = cycloalkyl, (un) substituted Phr R2 = Ph. NR3R4, (cycloalkyl; R3,R4 = (cycloalkyl; 2 = alkenylene, (heteroatom interrupted) alkylene] were prepd. Thus, 2,3-dihydro-5-(1-methylethyl)-!H-1,4-benzodiazepin-2-one [2 step prepn. from 2-(H2N)C6H3OCCHP42 and BrCH2COBF given) was N-protected and the product converted in 5 steps to 4-amino-2,3-dihydro-5-(1-methylethyl)-!H-1,4-benzodiazepin-2-thione which was amidated by 2,4-c12C6H3CH2CO2H and the product condensed with (s)-MeCH(NH2)CHZOH to give, after cyclization, title compds. (+)- and (-)-II. I have ICSO of <1000nM as IKS and/or IKr blockers. 108895-98-3

RL: RCT (Reactant): RACT (Reactant or reagent) [prepn. of 4-(alkanoylamino)imidazo[1,2-a][1,4]benzodiazepines and analogs as Class III antiarrhythmics) [1,2-a][1,4]benzodiazepines and candogs as Class III antiarrhythmics) [1,2-a][1,4]benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

146135-15-19
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 4-{alkanoylamino}imidazo[1,2-a][1,4]benzodiazepines and analogs as Class III antiarrhythmics)
146135-15-1 CARUS
Carbamic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 53 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:886117 CAPLUS
DOCUMENT NUMBER: 123:286105
TITLE: Preparation of 4-(alkanoylamino)inidazo[1,2-a][1,4]benzodiazepines and analogs as Class III
antiarrhythmics

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

Merck and Co., Inc., USA PCT Int. Appl., 53 pp. CODEN: PIXXD2 Patent DOCUMENT TYPE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| | | | | | | | | | | A. | | | | | DATE | | | |
|-----|------|-----|------|-------|-----|-----|------|------|------|-------|------|------|------|-----|------|------|-----|----|
| VO. | 951 | 46 | 94 | | A | | | | | | | | | | 1994 | 1121 | | |
| | V: | | AM, | AU, | BB, | BG, | BR. | BY. | CA, | CN, | CZ, | EE, | FI. | GE, | HU, | JP, | KG, | KP |
| | | | KZ, | LK, | LR, | LT, | LV, | MD, | MG, | MN, | NO, | NZ, | PL, | RO, | RU, | SI, | SK, | ŢJ |
| | | | TT, | UA, | US, | UZ | | | | | | | | | | | | |
| | RW | : | KE, | MV, | SD, | SZ, | AT, | BE. | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IE, | IT, | LU |
| | | | MC, | NL, | PT, | SE, | BF. | BJ, | CF. | CG, | CI, | CH, | GA, | GN, | ML. | MR, | NE, | 51 |
| | | | TD, | TG | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1994 | | | |
| ΑU | 951 | 29 | 36 | | A. | l | 1995 | 0613 | | A! | J 19 | 95-1 | 2936 | | 1994 | 1121 | | |
| ΑU | 686 | 71 | 5 | | В: | 2 | 1998 | 0212 | | | | | | | | | | |
| EΡ | 730 | 59 | 16 | | A. | ı | 1996 | 0911 | | E | 2 19 | 95-9 | 0412 | • | 1994 | 1121 | | |
| | R: | | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IE, | IT, | LI, | LU, | NL, | PT, | SE |
| JΡ | 095 | 00 | 1397 | | T | 2 | 1997 | 0114 | | JI | 19 | 94-5 | 1522 | • | 1994 | 1121 | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1996 | | | |
| IT | ' AP | PΙ | м. | INFO. | : | | | | | US 19 | 993- | 1556 | 69 | | 1993 | 1122 | | |
| | | | | | | | | | | | 994- | US13 | 546 | | 1994 | 1121 | | |
| S | DURC | B (| 5): | | | MAR | PAT | 123: | 2861 | 05 | | | | | | | | |

PRIORITY APPLN. INFO.: OTHER SOURCE(S):

2 ANSWER 54 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
1995:878027 CAPLUS
1995:878027 CAPLUS
124:86851
The synthesis of 1,2,7,11b-tetrahydroisoxazolo[2,3-d] [1,4] benzodiazepin-6(5H)-ones and 1,3,3a,9b-tetrahydroisoxazolo[4,3-c]quinolin-4(5H)-ones

AUTHOR(S): CORPORATE SOURCE: SOURCE:

ones Bourke, Sharon; Heaney, Frances Dep. Chemistry, Univ. College, Galway, Ire. Tetrahedron Letters (1995), 36(41), 7527-30 CODEN: TELEAY; ISSN: 0040-4039 Elsevier

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

JOHNAI TYPE: Journal
SURGE: English
RR SOURCE(S): CASREACT 124:86851
The reaction of various Et 3-[[2-(1-hydroxyiminoalkyl)phenyl]carbamoyl]acr
ylates with electron deficient olefins proceeds via a sequential dipole
formation, dipolar cycloaddn. sequence to furnish the
tetrahydroisoxazolo(2, 3-d][1, 4]benzodiazepin-6(5H)-ones and
tetrahydroisoxazolo(4, 3-c]quinolin-4(5H)-ones. The product distribution
reflects the nature of the reacting olefin and the position and extent
172658-27-4P
RL: SPN (Symbhetic acr)

L62 ANSWER 55 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:812809 CAPLUS
DOCUMENT NUMBER: 123:228227
IIILE: 123:228227
Preparation of 1-acylnethyl-2-oxo-3-phenylureido-5-haterocyclyl-1,4-benzodiazepines useful as CCK-B and/or gastrin receptor antagonists. Semple, Graener Ryder, Hamishi Szelke, Michael; Satoh, Masato; Ohta, Mitsuaki; Miyata, Keiji; Nishida, Akito; Ishii. Masato

rasacol Onta, Hitsuakir Hiyata, Keijir Nishida, Ak Ishii, Masato Yamanouchi Pharmaceutical Co. Ltd., Japans Ferring Research Ltd. PCT Int. Appl., 77 pp. CODEN: PIXMO2 PATENT ASSIGNEE(S):

DOCUMENT TYPE: Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PALEAL | INFOR | MAI I | ON: | | | | | | | | | | | | | | | |
|---------------|------------------------------|-------|-----|-----|-----|------|-------|------|-------|------|-------|-------|------|------|--------|-------|-----|-----|
| PA | TENT | NO. | | KI | ND | DATI | 2 | | A | PPLI | CATI | on n | ο. | DATE | | | | |
| | | | | | | | | | - | | | | | | • | | | |
| WO | 9506 | 040 | | λ | 1 | 1995 | 50302 | | 말 | O 19 | 94-G | B185 | 9 | 1994 | 0825 | | | |
| | v: | λM, | AΤ, | ΑU, | BB, | BG, | BR, | BY, | CA, | Œ, | CN, | cz. | DE, | DK. | EE. | ES. | FI. | |
| | | GB, | GE, | HU, | JP, | KE, | KG, | KP. | KR, | KZ. | LK. | LT. | w. | LV. | MD. | MG. | MN. | |
| | | MV, | NL, | NO, | NZ, | PL, | PT, | RO. | RU. | 5D. | SE. | SI. | SK. | TJ. | TT. | UA. | US. | |
| | | UZ, | VN | | | | | - | - | | | | | | , | | | |
| | RV: | KE, | MV. | SD. | AT. | BE. | CH. | DE. | DK. | ES. | FR. | GB. | GR. | IE. | IT. | 1.11. | MC. | |
| | | NL. | PT. | SE. | BF. | BJ. | CF, | CG. | CT. | OH. | GA | CN | MI | MD, | NT | SN, | TD. | ŤG. |
| GB | 2282 | 595 | | A | 1 | 199 | 0412 | | G | R 19 | 93-1 | 7693 | , | 1003 | 0825 | , | , | |
| CA | 2169 | DRG | | a. | | 199 | いてのとの | | | . 10 | 04-7 | 1600 | 80 | 1004 | のゅっに | | | |
| All | 9474 6874 9406 | 661 | | Δ. | , | 1996 | 0321 | | , , | 1 10 | 94-7 | 4661 | • • | 1004 | 0025 | | | |
| Atl | 6874 | 77 | | R | • | 1000 | 10226 | | • | , 19 | J | . 001 | | 1994 | 0023 | | | |
| 71 | 9406 | 474 | | | - | 1004 | 0220 | | ~ | . 10 | | | | 1004 | | | | |
| RD. | 7156 | 24 | | • | 1 | 1004 | 0323 | | - | . 12 | 94-0 | 2426 | • | 1994 | 0023 | | | |
| FP | 7156 | 24 | | | : | 1000 | 0400 | | | 13 | 94-9 | 2430 | • | 1994 | U0 Z 3 | | | |
| | | | | | | | | | | | | | | | | | | |
| - | R: | 442 | DE, | щ, | DE, | 1000 | ES, | FK, | GB, | GH, | 15, | 11, | .L1, | LU, | MC, | NL, | PT, | SE |
| CIT | 2202 | *** | | • | | 1990 | 12800 | | u | 4 19 | 94-1 | 9313 | 4 | 1994 | UB 25 | | | |
| no | 1129 7397 0950 1648 | 4005 | | Α. | - | 1996 | 1028 | | н | 19 | 96-2 | 05 | _ | 1994 | 0825 | | | |
| 31 | 0950 | 4005 | | Ι. | 2 | 1997 | 0422 | | J | 19 | 94-50 | 0743 | 9 | 1994 | 9825 | | | |
| AT | 1640 | 40 | | E | _ | 1998 | 0415 | | A1 | 19 | 94-9 | 2436 | 8 | 1994 | 0825 | | | |
| ES | 2117 | 797 | | T. | 3 | 1998 | 0816 | | E | 5 19 | 94-9 | 24361 | 8 | 1994 | 0825 | | | |
| FI | 9600 9600 | 836 | | A | | 1996 | 0422 | | P: | 19 | 96-8 | 36 | | 1996 | 0223 | | | |
| NO | 9600 | 747 | | A | | 1996 | 0425 | | NO | 19 | 96-7 | 47 | | 1996 | 0223 | | | |
| บร | 5728 | 829 | | A | | 1998 | 0317 | | US | 19 | 96-59 | 9156 | 7 | 1996 | 2020 | | | |
| US PRIORIT | Y APP | LN. I | NFO | . : | | | | | GB 19 | 93- | 1769: | 3 | | 1993 | 0825 | | | |
| | | | | | | | | | | 94- | GB185 | 59 | | 1994 | 0825 | | | |
| OTHER S | OURCE | (S): | | | MAR | PAT | 123:3 | 2282 | 27 | | | | | | - | | | |
| | | | | | | | | | | | | | | | | | | |

L62 ANSWER 55 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

168162-21-8 CAPLUS
Carbamic acid, [1-{3,3-dimethyl-2-oxobutyl}-2,3-dibydro-2-oxo-5-{2-pyridinyl}-1H-1,4-benzodiazepin-3-yl}-, ethyl ester (9CI) (CA INDEX NAME)

168162-29-6 CAPLUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 55 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

Title compds. [I: R4 = alkyl, cycloalkyl, aryl; R10 = halo, CH, Me, CMe, NR1R12, NO2, NHCHO, CO2H, cyanor R11, R12 = H, alkyl; NR1RR12 = Q1; a = 1-6; R2 = arom. 5- or 6-membered (substituted) heterocyclyl conty.

-qtoreq.2 heteroatans of which -qtoreq.1 is N1, were prepd. Thus, title compd. (II), prepd. from 2-aminophenyl 2-thiazolyl ketone via 3-amino-1-tert-butylcarbonylmethyl-2, 3-dihydro-5-(2-thiazolyl)-1H-1, 4-benzodiazepin-2-one, at 0.1 .ms.mol/kg in rats inhibited pentagastrin-stimulated gastric acid secretion by 55.2%. Tablets were prepd. conty. II.

168162-20-79 168162-21-69 168162-29-69
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of henzodiazepinones useful as CCK-B and/or gastrin receptor antagonists)
168162-20-7 CAPUS
Carbamic acid, [2,3-dihydro-2-oxo-5-(2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 56 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1995:723199 CAPLUS COPYRIGHT 2003 ACS ON STN 123:143931
TITLE: Prenareti- -

123:143931
Preparation of condensed seven-membered heterocyclic compounds useful as squalene synthetase inhibitors Yukimasa, Hidefumi: Tozawa, Ryuichir Sugiyama, Yasuor Kori, Hasakuni
Takeda Chemical Industries, Ltd., Japan Bur. Pat. Appl., 98 pp.
CODEN: EPXXIW
Patent
English INVENTOR (5):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 2

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
|-------------|-------------|------------|-------------------------------------|
| | | | |
| EP 645378 | Ai | 19950329 | EP 1994-114837 19940921 |
| | B1 | | |
| R: AI | , BE, CH, D | S, DK, ES, | FR, GB, GR, IE, IT, LI, LU, NL, PT, |
| AU 9473051 | | 19950406 | |
| AU 678503 | B2 | 19970529 | |
| NO 9403495 | λ | 19950327 | NO 1994-3495 19940920 |
| AT 195732 | E | 20000915 | AT 1994-114837 19940921 |
| AT 156820 | E | 19970815 | AT 1994-114939 19940922 |
| CA 2132792 | . AA | 19950325 | CA 1994-2132792 19940923 |
| CA 2132794 | AA | | CA 1994-2132794 19940923 |
| FI 9404418 | | 19950325 | FI 1994-4418 19940923 |
| HU 70962 | | 19951128 | |
| RU 2129547 | C1 | | RU 1994-34115 19940923 |
| CN 1106397 | | 19950809 | |
| CN 1054380 | | | |
| JP 0717944 | | | JP 1994-229159 19940926 |
| | | 19950718 | |
| US 5698691 | | 19971216 | |
| US 5677298 | | | |
| RITY APPLN. | | 133/1014 | US 1996-696118 19960813 |
| ALL APPLIA. | IMPO. : | | JP 1993-238273 A 19930924 |
| | | | JP 1993-241062 A 19930928 |
| | | | US 1994-312194 B1 19940926 |

OTHER SOURCE(S):

JP33-Z38273 A 19930924
JP 1993-Z41062 A 19930928
US 1994-312194 B1 19940926

ER SOURCE(S): MARPAT 123:143931

For diagram(s), see printed CA Issue.
The title compds. [If A = (un)substituted benzo or heterocyclomoiety! D.
K = C, N; R! = H. (un)substituted hydrocarby!; R2 = H. (un)substituted
alkyl, (un)substituted Ph. (un)substituted arom. heterocycly!; X =
esterified carboxyl, (un)substituted arom. heterocycly!; X =
esterified carboxyl, (un)substituted arom. heterocycly!; X =
esterified carboxyl, (un)substituted Ph. (un)substituted OH,
(un)substituted NHZ, (un)substituted OH,
(un)substituted O

165952-78-39 16992-79-4 ALLOS ALLOS

L62 ANSWER 56 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
(preps. of condensed seven-membered heterocyclic compds. useful as
squalene synthetase inhibitors)
RN 165952-78-3 CAPLUS
CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3dihydro-2-oxo-, methyl ester, (R)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

165952-79-4 CAPLUS IH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-{2-chlorophenyl}-2,3-dihydro-1-{2-methylpropyl}-2-oxo-, methyl ester, (R)- (9CI) (CA INDEX

Absolute stereochemistry.

165952-80-7 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-(2-methylpropyl)-2-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 56 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

165952-84-1 CAPLUS HH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-(2-methylpropyl)-2-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 56 OF 106 CAPLUS COPYRIGHT 2003 ACS OR STN (Continued)

165952-82-9 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-{2-chlorophenyl}-2,3-dihydro-2-oxo-, methyl ester, (5)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

165952-83-09 165952-84-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological activity or effector, except adverse); BSU (Biological actudy, unclassified); SFN (Synthetic preparation); TBU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of condensed seven-membered heterocyclic compds. useful as squalene synthetase inhibitors)
165952-83-0 CAPLUS
165952-83-0 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-1-(2-methylpropyl)-2-oxo-, methyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L62 ANSWER 57 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
11TLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
PATENT INFORMATION:

CAPIUS COPYRIGHT 2003 ACS on STN
1995:705722 CAPIUS
124:8856
Methods of treating cardiac arrhythmia with benzodiazepine analogs
Sanguinetti, Michael C.; Lynch, Joseph J., Jr.;
Salata, Joseph J.
Merck and Co., Inc., USA
U.S., 30 pp. Cont.-in-part of U.S. Ser. No. 18,912, abandoned.
CODEN: USXXXM
Patent
English
English
English
           PATENT NO.
                                                           KIND DATE
                                                                                                                  APPLICATION NO. DATE
US 5597818
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
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L62 ANSWER 57 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

A method of treating cardiac arrhythmia in namnals is claimed, comprising block of the slowly activating delayed rectifier potassium (K*) current (IK*) and the rapidly activating and deactivating delayed rectifier potassium current (IK*) through the administration of a 1,4-benzodiazepine compd. or a benzodiazepine deriv. (I7 Å is a 6-mezhered satd. or unsatd. carboocyclic ring or a 6-mezhered heterocyclic ring contg. N. or N and O, Y is, e.g., NH2, NHSORIR, IR = e.g., NHCGHNH-3, CGHR, NHCGHR-2, R2 is R or CONISO2R, R is straight or branched C1-6 alkyl or C1-3-alkylamine wherein the aning group is optionally mono- or disubstituted by C1-3-alkyl) wherein the 1,4-benzodiazepine or benzodiazepine deriv. provides 50 b block of the slowly activating delayed rectifier potassium [K*) current (IK*) in isolated myocytes at a concn. of 1 mu.M or less and wherein the 1,4-benzodiazepine exhibits a selectivity ratio of greater than 10 over blocked of IK*, IK* and ICa. Thus, e.g., benzodiazepine 11 [E-(4)-N-[(3R)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-3-(3,4-dichlorophenyl)-2-propenamide, prepn. given) increased APP90 (action potential duration at 90% of repolarization) more at fast vs slow rates: APD90 was increased an av. of 12.4% at 180 beats/min vs 9.4% at 60 beats/min; thus, at lower concns. the compd. increased APP90 in a forward frequency-dependent manner, and at higher concns., APD90 was increased equally at fast and slow rates. II was a selective blocker of IK*: it demonstrated abs. increases in the ventricular RRP (relative refractory period) obsd. at slower (60 beat/min) and faster (150 beat/min) heart rates at 1.0 mg/kg; iv., i.e., it displays frequency-independent activity to increase the RRP (e.g., increase in ventricular RRP at 60 beat/min was 29.6.+-. 4.4 ms immediate, 19.2.+-. 3.4 ms at 15 min, 14.0.+-. 2.3 ms at 30 min). 170284-32-99

L62 ANSWER 57 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 57 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

(methods of treating cardiac arrhythmia with benzodiazepine analogs)

RN 170284-32-9 CAPLUS

CA Carbanic acid, [(3R)-2,3-dihydro-1-methyl-5-phemyl-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phemylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

170551-99-2
RL: RCT (Reactant); RACT (Reactant or reagent)
[sethods of treating cardiac arrhythmia with benzodiazepine analogs)
170551-99-2 CAPLUS
Carbanic acid, [(3R)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

170629-30-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(methods of treating cardiac arrhythmia with benzodiazepine analogs)
170629-30-8 CAPIUS
Carbamic acid, (2,7-dihydro-1-methyl-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl)- (SCI) (CA INDEX NAME)

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ANSWER 58 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 555ION NUMBER: 1995:648003 CAPLUS 124:29787
                                                                                                                                                                      Preparation of benzodiazepinone inhibitors of Ras farnesyl-protein transferase Harsters, James C., Jr., Brown, Michael S., Crowley, Craig W., Goldstein, Joseph L., James, Guy L., Mcdowell, Robert S., Care, David, Rawson, Thomas E., Reynolds, Mark: Somers, Todd G. Genetech, Inc., USA: Board of Reagents, the University of Texas System PCT Int. Appl., 481 pp. CODEN: PIXXD2
Patent English
                                         NUMBER:
        INVENTOR(S):
        PATENT ASSIGNEE(S):
        SOURCE:
        DOCUMENT TYPE:
LANGUAGE:
                                                                                                                                                                             English
2
      FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
MAILI AND ATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION:

WO 9426723 A2 19941124 WO 1994-US5157 19940510
WO 9426723 A3 19950202
V: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JF, KG, KF, KR, KZ, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, IJ, TT, UX, UZ, VN
RW: AI, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, CA 2160786 AA 19941124 CA 1994-2160786 19940510
AU 9469091 A1 19941212 AU 1994-69091 19940510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LL, UM, MC, NL, PT, SE JP 9500615 T2 19970121 JP 1994-525630 19940510
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LL, LU, MC, NL, PT, SE JP 763537 A2 19970319 EP 1996-118160 19940510
EP 763537 A3 19971022
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LL, LU, MC, NL, PT, SE US 5843941 A 19981201 US 1994-313068 19940526
US 5532359 A 19960702 US 1994-328595 19941025
PRIORITY APPLN. INFO: US 1993-61961 19930514 US 1993-822002 19930624 EP 1994-917332 19940510

MARPAT 124:29787 CA 15508
     OTHER SOURCE(S): MARPAT 124:29787

Source(S): MARPAT 124:29787

For diagram(s), see printed CA Issue

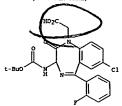
Benzodiazepine derivs. [I: R, R5 - H, halogen, (un)substituted alkyl,
alkow, CH, etc., R1 - CF3, (un)substituted Phr R3, R4 - H, halogen,
(un)substituted alkyl, Ph, PhCH2: R7 - H, halogen, alkyl, haloalkyl; V -
(un)substituted carboxanide, (un)substituted carboxy, etc., X -
(un)substituted NH2, (un)substituted aryl, (un)substituted heterocyclyl,
(un)substituted alkyl, etc.] are described that act as potent inhibitors
of Ras farnesyl-protein transferase, thus making them useful in the
treatment of cancers and fungal infections. Thus, benzodiazepinone II
diastereomer mixt. was prepd. and demonstrated in-vitro 50% inhibition of
CAXA farnesyl-transferase at 1.8 .m.M.

IT 164338-23-2P

RE: BAC (Biological activity or effector, except adverse); BSU (Biological)
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164338-23-29
RL: BAC [Biological activity or effector, except adverse): BSU (Biological study, unclassified): FSN (Synthetic preparation): TRU (Therapeutic use): BIOL (Biological study): PREP (Preparation): USES (Uses) (prepn. of benzodiazepinone inhibitors of Ras farnesyl-protein transferase)
164338-23-2 CAPLUS

ANSVER 58 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
1H-1.4-Benzodiazepine-1-acetic acid, 7-chloro-3-{{{1,1-dinathylethoxyloarbonyl}anino}-5-{2-fluorophenyl}-2,3-dihydro-2-oxo-(9CI)
(CA INDEX NAME)



164336-13-4P 164336-14-5P 164336-15-6P location-13-49 164336-14-59 164336-15-69
RE: RCT (Reactant): SPM (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. of benzodiazepinone inhibitors of Ras farnesyl-protein transferase)
164-1356-13-4 CAPLUS
18-1,4-Benzodiazepine-1-acetic acid, 3-{{(1,1-dinethylethoxy)carbonyl}amino}-2,3-dihydro-2-oxo-5-phenyl- (9CI) (CA INDEX NAME)

| Hell-14-Benzodiazepins-1-acetic acid, 3-[[(1,1-dimethylathoxy)carbonyl]methylathoxy|carbonyl]methylanino]-2,3-dihydro-2-oxo-5-phenyl- (9CI) (CA INDEX NAME)

ANSWER 59 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

1955:606572 CAPLUS

123:33642

Preparation of amino acid amide analogs as cholecystokinin antagonists.

NTOR(S): Horvell, David C., Aranda, Julian, Augelli-Szafran, Corinne, Betche, Hans-Jurgen, Holmes, Ann, Mullican, Michael D., Pritchard, Martyn C., Richardson, Reginald S., Roberts, Edward; et al.

NT ASSIGNEE(S): Warner-Lambert Co., USA

CE: U.S., 64 pp. Cont.-in-part of U.S. Ser. No. 576,308, abandoned.

CODEN: USXXMM

PATENT ASSIGNEE (S): SOURCE:

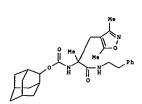
CODEN: USXXAM

English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

INVENTOR (S):

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|-----------------------------------|--------------------|--------------------|----------|
| | | | |
| US 5331006 | A 19940719 | US 1991-726656 | 19910712 |
| WO 9204025 | A1 19920319 | WO 1991-US6181 | 19910829 |
| W: AU, CA, | FI, JP, KR, NO | | |
| | CH, DE, DK, ES, FR | GB, GR, IT, LU, NL | , SE |
| AU 9186538 | A1 19920330 | AU 1991-86538 | 19910829 |
| ZA 9106918 | A 19930301 | ZA 1991-6918 | 19910830 |
| PRIORITY APPLN. INFO | .: | US 1990-576308 | 19900831 |
| | | US 1991-726656 | 19910712 |
| | | WO 1991-US6181 | 19910829 |
| OTHER SOURCE(5): MARPAT 123:33642 | | | |



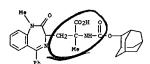
RIANHCR2(CH2Ar2)CONR9CR12R3CR13R&Ar [R] = (substituted) cycloalkyl, polycycloalkyl; A = (CH2)aCO, SO2, SO, NHCO, (CH2)aO2C, SCO, etc.; n = 0-6; R2 = alkyl, CH:CH2, C.tplbond.CH, (CH2)aCA, etc.; R3, R4 = H, R2, etc.; R9 = H, alkyl, (CH2)aCO2A, etc.; R = H, alkyl; R12, R13 = H or are independently taken with R3, R4, resp., to form a moiety doubly bonded to C; Ar = (substituted) (poly)cyclic carbor or heterocyclic moiety; Ar2 = Ar, or CH2Ar2 = sidechain of a biol. significant amino acid; with provisos), were prepd. Title compd. I was prepd. by soln. phase methods. Title compds. were active in CCK binding assays using mouse cerebral cortex prepns. Title compds. are claimed as ulcer inhibitors.

L62 ANSWER 58 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

164336-15-6 CAPLUS L-Methionine, N-[[3-[[(1,1-dimethylethoxy)carbonyl]methylamino]-2,3-dihydro-2-xoo-5-phenyl-1H-1,4-benzodiazepin-1-yl]acetyl]-, methyl ester (9Cl) (CA INDEX NAME)

L62 ANSWER 59 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN IT 163798-60-5P

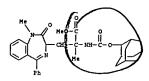
163798-60-5p
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of anino acid amide analogs as cholecystokinin antagonists) 163798-60-5 CAPJUS
1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-alpha.,1-dimethyl-2-oxo-5-phenyl-alpha.-[[(tricyclo[3.3.1.13,7)dec-2-yloxy)carbonyl]amino]-(9CI) (CA INDEX NAME)



IT

142910-51-8P 142910-52-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of amino acid amide analogs as cholecystokinin antagonists)
142910-51-8 CAPLUS
14-1,4-Benzodiazepine-3-propanoic acid, .alpha.-amino-2,3-dibydro-.alpha.,1-dimethyl-2-oxo-5-phenyl-, methyl ester (9CI) (CA INDEX NAME)

142910-52-9 CAPLUS
1H-1, 4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-.alpha.,1-dimethyl-2oxo-5-phenyl-.alpha.-[{(tricyclo[3,3.1.13,7]dec-2-yloxy]carbonyl]anino}-,
methyl ester (9CI) (CA INDEX NAME)



ANSVER 60 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN SSION NUMBER: 1995:579927 CAPLUS TROIT NUMBER: 123:257392

AUTHOR (S):

123:257392
Synthesis of a new nonnaturally occurring anino acid with a benzodiazepine group in the side chain and incorporation in a tripeptide
Mulzer, Johanns Schroeder, Fridtjofs Lobbia,
Alessandros Buschnann, Juergens Luger, Peter
Inst. Org. Chen., Freien Univ., Berlin, D-14195,
Germany CORPORATE SOURCE:

Germany
Angevandte Chemie (1994), 106(17), 1813-15, (See also
Angev. Chem., Int. Ed. Engl., 1994, 33(17), 1737-9)
CODEN: ANCEAD: ISSN: 0044-8249 SOURCE:

PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE:

German CASREACT 123:257392 OTHER SOURCE(S):

Protected benzodiazepine-contg. amino acid I [R = 9-fluorenylmsthoxycarbonyl (Fmoc), Rl = OH] was prepd. in 7 steps from .gamma.-Me L-glutamate. Amino acid I [R = Fmoc, Rl = OH] participated in solid-phase peptide coupling reactions to give tripeptide I [R = Ac-Leu, Rl = Ala-NHZ]. Redn. of I [R = Fmoc, Rl = OH] with NaHHZON gave tricycle II as a 5:1 epimeric mixt. at the Ph position, while redn. of tripeptide I [R = Ac-Leu, Rl = Ala-NHZ] gave reduced tripeptide III as a single disstereomer.

165141-58-69
REL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(asym. synthesis of a benzodiazepine-contg. amino acid and incorporation into a tripeptide)
165141-59-6 CAPUS
1H-1,4-Benzodiazepine-3-propanoic acid, .alpha.-[{(9H-fluoren-9-ylmethoxy)carbonyl]amino]-2,3-dihydro-2-oxo-5-phenyl-, {S-(R*,R*)}- (9CI)

L62 ANSWER 61 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1995:336735 CAPLUS DOCUMENT NUMBER: 122:160619
TITLE: An Improved Service of the control of the con

122:160619
An Improved Synthesis and Resolution of
3-Amino-1,3-dihydro-5-phenyl-2H- 1,4-benzodiazepin-2-

AUTHOR(S): CORPORATE SOURCE:

3-Amino-1,3-dihydro-5-phenyl-ZH- 1,4-benzodiazepirones
Sherrill, Ronald G.; Sugg, Elizabeth E.
Department of Medicinal Chemistry, Glaxo Research
Institute, Research Triangle Park, NC, 27707, USA
Journal of Organic Chemistry (1995), 60(3), 730-4
CODEN: JOCEAH; ISSN: 0022-3263
American Chemical Society
Journal
English
CASREACT 122:160619

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

11

A novel synthesis of (.+-.)-3-amino-5-phenyl-1,4-benzodiazepin-2-one (6b) in 661 overall yield from 2-aminobenzophenone is described. This sequence employs .alpha.-benzotriazo-1-yl glycine as an aminoglycine synthon to prep. the key internediate 3-benzyloxycarbonylamino-1,4-benzodiazepin-2-one (6a) in 733 overall yield. The racemic amine 6b is resolved via an improved diastereomeric derivatization employing the p-nitrophenyl carbonate of .alpha.-nethylbenzyl alc. The resoln. protocol was assessed through the synthesis of selective CCK antagonists, MK-329 (I) and L-365,260 (II).
161365-75-99 161365-76-09 161443-31-eP
161443-32-9P
RL: RCT (Reactant). SPN (Synthetic preparation): PREP (Preparation): PACT (Reactant or reagent)
[synthesis and resoln. of aminodihydrophenyl benzodiazepinones)

Page 68

ANSWER 60 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (CA INDEX NAME) L62

Absolute stereochemistry. Rotation (+).

169141-57-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asyn. synthesis of a benzodiazepine-contg. amino acid and
incorporation into a tripeptide)
169141-57-5 CAPLUS
IH-1,4-Benzodiazepine-3-propanoic acid, .alpha.-[[(SH-fluoren-9ylnethoxy)carboxyl]amino]-2,3-dihydro-2-oxo-5-phenyl-, [R-(R*,5*)]- (SCI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L62 ANSWER 61 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RN 161365-75-9 CAPLUS
CN Carbanic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, {R-(R*,S*)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161365-76-0 CAPLUS
Carbanic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

161443-31-8 CAPLUS
Carbanic acid, [(3S)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, [1R)-1-phenylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161443-32-9 CAPLUS Carbanic acid, [3R)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, (1R)-1-phenylethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 61 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

ΙŤ

108895-98-3P RL: SFN (Synthetic preparation), PREP (Preparation) (synthesis and resolm. of aminodibydrophenyl benzodiazepinones) 108895-98-3 CAPUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9C1) (CA INDEX NAME)

L62 ANSWER 62 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 62 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1995: 328917 CAPLUS DOCUMENT NUMBER: 122:230118

122:220118
Selective non-peptide ligands for an accommodating peptide receptor. Inidazobenzodiazepines as potent cholecystokinin type B receptor antagonists Boock, Mark G.; DiFardo, Robert M.; Newton, Randall C.; Bergaan, Jeffrey H.; Veber, Daniel F.; Freedman, Stephen B.; Smith, Alison J.; Chapman, Kerry L.; Patel, Smits; et al. Departments Medicinal Chemistry Biochemistry, Herck Research Laboratories, Vest Point, PA, 19486, USA Bioorganic & Hedicinal Chemistry (1994), 2(9), 987-98 COLEN: BMECEP; ISSN: 0968-0896
Elsevier Journal English

AUTHOR (5):

CORPORATE SOURCE: SOURCE:

PUBLI SHER DOCUMENT TYPE: LANGUAGE:

MENT TYPE:

Journal

RUAGE:

English

A series of inidazobenzodizzepines, non-peptide antagonists of the peptide
hormone cholecytokinin (CCK), are described. Derived by chem.
modification of the benrodiazepine ring system enhedded within the CCK-B
antagonist L-365, 260, these compds. display CCK-B/CCK-A selectivity and
some analogs have receptor binding affinities in the subnannonlar range.

This group of novel inidazobenzodiazepines, among which

N-([25,4R]-nethyl-6-phenyl-2,4-dibydro-HB-inidazo(1,2-a][1,4]benrodiazepin4-yl]-N'-[3-methylphenyl]-urea is the principal compd., expands the
structural diversity of the collection of non-peptide CCK-B antagonists
and will be useful in further delineating the function of CCK in the
central nervous system.

146135-13-19 162225-86-7p

RL: RCT (Reactant): SPN (Synthetic preparation), PRFF (Preparation), PRFF

18613-18-18 182223-86-7F
RE: RCT (Reactant), SFN (Synthetic preparation), PREP (Preparation), RACT
(Reactant or reagent)
(inidazobenzodiazepines as potent cholecystokinin type B receptor
antagonists in relation to structure)
146135-15-1 CAPUS
Carbanic acid, (2,3-dibydro-5-phenyl-2-thioxo-lH-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

162225-86-7 CAPLUS
Carbanic acid, [2-[(2-hydroxypropyl)amino]-5-phenyl-3H-1,4-benzodiazepin-3-yll-, phenylnethyl ester (SCI) (CA INDEX NAME)

AUTHOR (S):

CORPORATE SOURCE:

SOURCE:

PUBLI SHER

DOCUMENT TYPE: LANGUAGE:

| New York | New York

162 ANSWER 63 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

L62 ANSWER 64 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

156815-72-4 CAPLUS

IH-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-8-hydroxy-2-oxo-5-phenyl-1-(phenylmethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

156815-84-8 CAPLUS

1H-1,4-Benzodiazepine-3-acetic acid, 1-acetyl-2,3-dihydro-8-hydroxy-2-oxo-5-phenyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

156815-96-2 CAPLUS IH-1,4-Benzodiazepine-3-acetic acid, 1-ethyl-2,3-dihydro-8-hydroxy-2-oxo-5-phenyl-, (S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

1819-56216 091615-60-0P 156815-72-4P 156815-48-4P 156915-96-2P 156816-07-8P 156816-19-2P 156816-19-2P 156816-19-2P

136016-19-29 156847-14-2P
RE: SPN (Synthetic preparation); PREF (Preparation)
 (prepn. and cholecystokinin receptor binding activity of, structure in relation to)
156015-48-4 CAPLUS
HF-1,4-Benzodiazepine-3-acetic acid, 2,3-dibydro-8-hydroxy-2-cxo-5-phenyl-, (S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

156815-60-0 CAPLUS

HB-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-8-hydroxy-1-methyl-2-oxo-5-phenyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 64 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

156816-07-8 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dibydro-8-hydroxy-2-oxo-5-phenyl-1-propyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

156816-19-2 CAPLUS 1H-1,4-Benzodiazepine-3-acetic acid, 1-heptyl-2,3-dihydro-8-hydroxy-2-oxo-5-phenyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

156847-14-2 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-8-hydroxy-1[(nethylphenyl)methyl]-2-oxo-5-phenyl-, (S)- (9CI) (CA INDEX NAME)

L62 ANSWER 64 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 65 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

ΙT

136234-80-5P
RL: SPN (Synthetic preparation)) PREP (Preparation)
(prepn. of, as CCK and gastrin antagonist)
136234-80-5 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

108895-98-3 136051-20-2
RL: RCT (Reactant): RACT (Reactant or reagent)
(reaction of, in preph. of CCK and gastrin antagonists)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmathyl ester (9CI) (CA INDEX NAME)

136051-20-2 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

INVENTOR (5): PATENT ASSIGNEE (5): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English 2

| PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
|--------------------------------------|------|----------|----|-------------------------------|----------------------|
| US 5324726 PRIORITY APPLN. INFO.: | A | 19940628 | US | US 1992-968624 1989-452012 | 19921029 19891218 |
| | | | | 1990-621500 1992-824764 | 19901207 19920117 |

OTHER SOURCE(S): MARPAT 121:205398

$$x_n^1 \xrightarrow{R^1 \times 7} R^3$$

Title compds. I (R1 = C1-6 alkyl, alkenyl, alkynyl, HD2C-C1-4 alkylidene, NC-C1-4 alkylidene, etc.: R2 = H. alkyl, (substituted) Ph. pyridyl, heterocyclyl-CONH (CH2)2-3NH, etc.: R7 = 2-aninopyridyl, substituted Ph. (substituted) heterocyclyl, O, S, EN, alkylanino, etc.: X1 = H, OZN, F3C, NC, HO, halo, alkyl, etc.: r = 1,3), are prepd. I as also claimed for treatment of gastric secretion, appetite regulation, gastrointestinal motility, pancreatic secretion, and dopaninergic function.

3(R)-anino-1,3-dihydro-1-methyl-5-phenylZH-1,4-benzodiazepin-2-one and 3-methylphenyl isocyanate were mixed in THF to give (R)-I (R1 = Me, T2 = Ph, R3 = NHCONH(3-MeGMH)). I showed CCK and gastrin antagonism.

146943-26-29

RL: RCT (Reactant): SPN (Synthetic preserved.)

146943-26-27
RE.: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction of, in prepn. of CCK and gastrin antagonists) 146943-26-2 CAPLUS

Carbanic acid, [1-(2-chloroethyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 65 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

PATENT ASSIGNEE(S):

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1594:463390 CAPLUS
DOCUMENT NUMBER: 121:83390 EACH STN
ITILE: Benzodiazepine CCK-B receptor at Ryder, Hamish; Semple, Graeme; 1

121:63390
Benzodiszepine CCK-B receptor antagonists
Ryder, Hamish: Semple, Graeme: Kendrick, David Alan:
Szelke, Michael: Satoh, Masato: Ohta, Mitsuaki:
Miyata, Keiji: Nishida, Akito
Yananouchi Pharmaceutical Co. Ltd., Japan: Ferring

rananouchi Pharmaceutic Research Ltd. PCT Int. Appl., 120 pp. CODEN: PIXXD2 SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

VO 9316999 A1 19930902 VO 1993-GB404 19930226

V: AT, AU, EB, BG, BR, CA, CH, CZ, DE, DX, ES, FI, GB, HU, JP, KP, KR, LK, LU, HG, HN, MY, NL, NK, NZ, PL, PT, RO, RU, SD, SE, SK, UM, US

RW: AT, EE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, HC, NL, PT, SE, EF, BJ, CF, CG, CT, CM, GA, CM, HL, HR, SN, TD, TG

GB 2264492 B2 19960925
AU 9336391 A1 19930913 GB 1992-4221 19920227
GB 226492 B2 19960925
AU 9336391 A1 19930913 AU 1993-36391 19930226
EP 628033 B1 20030722
EP 628033 B1 20030722
R: AT, EE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, HC, NL, PT, SE JP 628033 B1 20030723

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, HC, NL, PT, SE JP 07505121 T2 19950608
JP 1933-506433 19930226
US 2139282 C1 19991010 RU 1994-38255 19930226
NO 9403133 A 19940824 NO 1994-3133 19940826
FI 9403941 A 19940326 US 1994-284462 19940914
FRIORRITY APPLN. INFO:: GB 1992-42140 A 19920227
GB 1992-12740 A 19920227
GB 1992-12740 A 1992026 B2 19970116
C1 19991010 RU 1994-38255 19930226
A 19940824 NO 1994-3133 19940824
A 19940826 FI 1994-3941 19940826
A 19971118 US 1994-284462 19940826
GB 1992-4221 A 19920227
GB 1992-4221 A 19920227
GB 1992-4270 A 19920626
MARPAT 121:83390

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

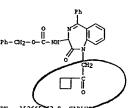
Carbamic acid, [1-(2-cyclopenty1-2-cxoethy1)-2,3-dihydro-2-cxo-5-pheny1-1H-1,4-benzodiazepin-3-y1]-, phenylmethyl ester (9CI) (CA INDEX NAME)

152665-70-8 CAPLUS

Carbanic acid, [1-(2-cyclohepty1-2-oxoethy1)-2,3-dihydro-2-oxo-5-pheny1-1H-1,4-benzodiazepin-3-y1]-, phenylmethy1 ester (9CI) (CA INDEX NAME)

152565-76-4 CArlus 1-Pyrrolidinecarboxylic acid, 2-[[2,3-dihydro-2-oxo-5-phenyl-3-

Page 72



152655593___CAELUS Carbanic acid, [1-[3,3-dimethyl-2-oxobutyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) [[(phenylmethoxy) carbonyl aminol-Ht-1,4-benzodiazepin-1-yl]acetyl]-,1,-dimethylethyl ester (SCI) (CA INDEX NAME)

152665-89-9 CAPLUS
Carbanic acid, [1-(2-cyclopentyl-2-oxoethyl)-2,3-dihydro-2-oxo-5-phenyl-1H1,4-benzodiazepin-3-yl]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX
NAME)

152666-04-1 CAPLUS
Carbanic acid, [1-{2-cyclohexyl-2-oxoethyl}-2,3-dihydro-2-oxo-5-phenyl-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS OR STN (Continued)

155412-31-0 CAPLUS
Carbanic acid, [1-{3-cyclohexyl-2-oxopropyl}-2,3-dibydro-2-oxo-5-phenyl-lH1,4-benzodiarepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

155412-33-2 CAPLUS
Carbanic acid, {1-(3-cyclopentyl-2-oxopropyl)-2,3-dihydro-2-oxo-5-phenyl-lH-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

155412-34-3 CAPLUS
Carbanic acid, [2,3-dihydro-1-[2-(1-methylcyclohexyl)-2-oxoethyl)-2-oxo-5phenyl-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester [9CI] (CA INDEX NAME)

155412-46-7 CAPLUS
Carbanic acid, [2,3-dihydro-1-{2-(1-methylcyclopentyl)-2-oxoethyl]-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

155412-52-5 CAPLUS Carbanic acid, 12-3-drhydro-2-oxo-1-(2-oxo-2-tricyclo[3.3.1.13,7]dec-1-ylethyl)-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

155412-55-0 CAPLUS Carbanic acid, (1-(3-cyclohexyl-3-methyl-2-oxobutyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

155412-57-0 CAPLUS
Carbanic acid, {2,3-dihydro-1-[2-{1-methylcyclopropyl}-2-oxoethyl]-2-oxo-5phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX
NAME)

155412-59-2 CREEDS
Carbanic acid, [7-chloro-5-(2-chlorophenyl)-1-(3,3-dimethyl-2-oxobutyl)2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI)
(CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

t-Bu-C

155412-61-6 CAPLUS
Carbanic acid, [2,3-dibydro-1-(3-methyl-2-oxobutyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

155412-80-9 CRUIS
Carbanic acid, [7-chloro-1-[3,3-dimethyl-2-oxobutyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

155412-83-2 CAPIDS Carbanic acid, [1-{3,3-dlmethyl-2-oxobutyl}-2,3-dlhydro-8-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX RAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
152665-83-3 CAPLUS
COPYRIGHT 2003 ACS on STN (Continued)
15265-83-3 CAPLUS
C

108895-98-3 152665-84-4 155452-87-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of benzodiazepinecholecystokinin and gastrin
receptor antagonists)
108895-98-3 CAPUIS
Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

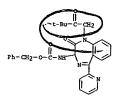
152665-84-4 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-5-(2-pyridinyl)-lH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

155478-05-0 CAPLUS

Carbanic acid, [1-{3,3-dimethyl-2-exceptyl}-2,3-dihydro-2-exc-5-phenyl-lH-1,4-benzediazepin-3-yl]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)

186086-59-9 CAPLUS
Carbanic acid, {1-{3,3-dimethyl-2-oxobutyl}-2,3-dihydro-2-oxo-5-{2-pyridinyl}-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (SCI) (CA



ΙŢ 152665-83-3

RL: RCT (Reactant): RACT (Reactant or reagent)
(prepn. cholecystokinin and gastrin receptor antagonist activity of)

L62 ANSWER 66 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

155452-87-2 CAPLUS
Carbamic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

22 ANSWER 67 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACESSION NUMBER: 1994:323613 CAPLUS CODUMENT NUMBER: 120:323613 Freparation of the control of the contr

120:323613
Preparation of (benzisoxazolylacetamido)benzodiazepino nes and analogs as antiulcer agents
Antoni, Torrens Jover; Jordi, Frigola Constansa
Laboratorios del Dr. Esteve SA, Spain
Fr. Denande, 23 pp.
CODEN: FROKEL INVENTOR (5): PATENT ASSIGNEE (5): SOURCE:

DOCUMENT TYPE: P:
LANGUAGE: P:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: Patent

PATENT NO. KIND DATE

FR 2694006 A1 19940128

PRIORITY APPLN. INFO::
OTHER SOURCE(S): MARPAT 120-32 APPLICATION NO. FR 1992-9033 1992072 FR 1992-9033 MARPAT 120:323613

Title compds. [I; R = NR1R2; R1 = CHR11COR12, azepinyl group Q; R2 = H, alkyl; R3 = H, Me, halo, alkosy, etc.; X1 = O, S, NR4; X2 = N, CR5; R4, R5 = H. (carboxy)alkyl, etc.; X4 = H, alkosy, cyano, NH2; etc.; Z = bond, alkylene, NR6; R6 = H, alkyl; R9 = H, (carboxy)alkyl; alkosycarboxyl(alkyl); R10 = H, halo, alkosy; R11 = 3-indolylaethyl, carboxyalkyl; R12 = NH2, 8-azaspiro(4,5]decan-8-yl, etc.; Z122 = C:N, NCO] were preped. Thus, 3-anino-2,3-dihydro-1-nethyl-5-phenyl: HH-1,4-becodiazepin-2-one was condensed with 1,2-benziosoxable-3-acetyl chloride to give 3-[3-[1,2-benziosoxably], A-bezodiazepin-2-one which had ic50 of 10-7M against isobutylmethylxanthine-induced gastric acid secretion in perfused mouse stonach.

Stonach.

18624-80-5
RL: RCT (Reactant); RACT (Reactant or reagent)
[reaction of, in prepn. of antiulcer agent)
18624-80-5 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

ANSVER 68 OF 106 CAPLUS COPYRIGHT 2003 ACS OD STN 3SION NUMBER: 1994:270467 CAPLUS 120:270467 DOCUMENT NUMBER: TITLE: 120:270467
(Ureido) benzodiazepinone cholecystokinin-B and gastrin receptor antagonists
Ryder, Hamish; Semple, Graeme; Kendrick, David A.;
Szelke, Hichael; Satoh, Masato: Ohta, Missuaki;
Miyata, Keiji; Nishida, Akito
Yamanouchi Pharmaceutical Co. Ltd., Japan; Ferring
Research Institute
Brit. UK Pat. Appl., 37 pp.
CODEN: BAXXDU
Patent INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent English 2 FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

GB 2264492 Al 1930091 GB 1992-4221 19920227
GB 2264492 B2 19360925
IL 104853 Al 19971120 IL 1993-08404 19930225
WO 9316999 Al 19930302 WO 1993-G8404 19930226
W: AT, AU, BB, BC, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, WO 1993-68404 19930226
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GM, ML, MR, SN, TD, TG
AU 9336391 Al 19930913 AU 1993-36391 19930226
EP 628033 Al 19941214 EP 1993-905480 19930226
EP 678033 Al 19941214 EP 1993-905480 19930226
EP 678033 Al 19941214 EP 1993-905480 19930226
CP 107505121 T2 19950509 HD 1994-2212 19930226
UF 07505121 T2 19950609 TP 1993-506433 19930227
CP 1051079 A 19930910 RU 1994-38255 19930227
CP 1051079 A 19930910 RV 1993-82102213 19930324
NO 9403133 A 1994024 NO 1994-3133 19940824
FI 9403941 A 19941026 FI 1994-3941 19940826
US 5689434 A 19971118 US 1994-24462 19970606
PRIORITY APPLN. INFO::

GB 2264492 A 1992027
GB 1992-4221 A 1992027
GB 1992-4221 A 1992027
GB 1992-12740 A 19920616
VO 1993-G8404 A 19931025 PATENT NO. APPLICATION NO. DATE
GB 1992-4221 19920 KIND DATE

ZUUUU405
B 20010607 TW 1993-82102213 19930324
A 19940824 NO 1994-3133 19940824
A 19941026 FI 1994-9941 19940826
A 19971118 US 1994-284462 19940914
A 19991005 US 1997-687422 19970914
C GB 1992-4221 A 19920227
GB 1992-4221 A 19920227
GB 1992-12740 A 19920227
GB 1993-GB404 A 19920226

OTHER SOURCE(S):

Page 75

L62 ANSWER 67 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 68 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

The title compds. I [R] = CH2CHOH(CH2) aR4, CH2CO (CH2) aR5; R4, R5 = alkyl, cycloalkyl, (un) substituted satd. heterocyclic groups; a = 0, l; R2, R3 = arcm. carbocyclic and heterocyclic residues), which are cholecystokinin-B and gastrin receptor antagonists, useful in the treatment of diseases mediated by the central cholecystokinin-B receptor, are prepd. and l-contg. pharmaceutical formulations presented. Thus, N-[(1-cyclopentylcarbonylmethyl)-2,3-dihydro-2-cwo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-N-[3-methylphenyl]urea [II], prepd. from cyclopentanecarboxylic acid in three steps, demonstrated 50% inhibitory concn. against rat brain-derived cholecystokinin-B receptors of 0.2 nH. 152665-61-79 152655-63-99 152665-66-76-49

REL: RCT (Reactant): 5PM (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) [PREP (Preparation) of cholecystokinin-B and gastrin receptor antagonists) [PREP (PREPARATION OF CAPILIS)]

132bb-bi-/ Caruus Carbamic acid, [1-(2-cyclobuty1-2-oxoethy1)-2,3-dihydro-2-oxo-5-pheny1-1H-1,4-benzodiazepin-3-y1]-, phenylmethy1 ester (9CI) (CA INDEX NAME)

CAPLUS 152665-63-9

182605-63-4 CAPUS Carbanic acid, [1-(3,3-dimethyl-2-oxobutyl)-2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

152665-66-2 CPLUS
Carbanic acid, N-(3-ex-9)-2-oxopentyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 68 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

152665-68-4 CAPLUS
Carbanic acid, [1-(2-tyclopentyl-2-oxoethyl)-2,3-dibydro-2-oxo-5-phenyl-lH1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

Carbanic acid, [1-(2-cycloheptyl-2-oxoethyl)-2,3-dihydro-2-oxo-5-phenyl-lH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 68 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

152666-04-1 CAPLUS
Carbamic acid, [1-{2-cyclohexyl-2-oxoethyl}-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

108895-98-3 132665-84-4
RL: RCT (Reactant): RACT (Reactant or reagent)
 (reaction of, in prepn. of cholecystokinin-B and gastrin receptor antagonists)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

Page 76

L62 ANSVER 68 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

EN 152665-76-4 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[2,3-dibydro-2-oxo-5-phenyl-3[[(phenylmethoxyl)carboxyl]amino]-IR-1,4-benzodiazepin-1-yl]acetyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Carbanic acid [1-(2-cyclopentyl-2-oxoethyl)-2,3-dibydro-2-oxo-5-(2-pyridinyl)-H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

152665-89-9 CAPLUS
Carbanic acid, [1-(2-cyclopentyl-2-oxoethyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, (4-nitrophenyl)methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 68 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RN 15265-84-4 CAPLUS
CN Carbanic acid, [2,3-dihydro-2-oxo-5-{2-pyridinyl}-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

INVENTOR(S):

ANSVER 69 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
TESSION NUMBER: 1994:245179 CAPLUS
120:245179
TILE: Preparation of benzodiazepine derivatives as cholecystokinin B and gastrin receptor antagonists Satch, Masato, Okanoto, Yoshionori, Koshio, Hiroyuki, Nishida, Akitor Miyata, Kejji Ohta, Hitsuaki Ryder, Hamish; Kendrick, David A.; Semple, Graene, Stelke, Michael
AMENT ASSIGNEE(5):

PATENT ASSIGNEE (S): Yananouchi Pharmaceutical Co., Ltd., Japan: Ferring

B.V. PCT Int. Appl., 91 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: J
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: Japanese

PATENT NO. KIND DATE APPLICATION NO. DATE PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

L62 ANSWER 69 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

154064-10-5 CAPLUS
Carbamic acid, [2,3-dihydro-1-[2-(2-methylphenyl)-2-oxoethyl]-2-oxo-5-(2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

108895-98-3 152665-84-4
RL: RCT (Reactant) RACT (Reactant or reagent)
{reaction of, in prepn. of cholecystokinin B and gastrin receptor antagonist}
108895-98-3 CABLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 69 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

The title compds. I [RI = H, alkyl, OH; R2 = Ph having one or more substituents, pyridyl, etc. (further details on substituents of said Ph are given), R3 = Ph, pyridyl; a proviso is given] were prepd. I inhibit gastric juice secretion. Treatment of benzodiazepine II with 400 HBF in AcOH, followed by reaction with m-tolyl isocyanate, gave henzodiazepine III. The title compds. in witro exhibited an ICSO of 0.16 to 2.14 EM against cholecystokinin B binding. Formulations contg. I are given. 154064-08-1P 154064-01-5P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of cholecystokinin B and gastrin receptor antagonist)
154064-08-1 CAPUS
Carbanic acid, [2,3-dihydro-2-oxo-1-(2-oxo-2-(2-(phenylmethoxy)phenyl]ethyl]-5-phenyl-IH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 69 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

152665-84-4 CAPLUS
Carbamic acid, [2,3-dihydro-2-oxo-5-(2-pyridinyl)-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

CORPORATE SOURCE: SOURCE:

ANSVER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACSSIGN NUMBER: 1994:217628 CAPLUS COPYRIGHT 2003 ACS on STN 120:217628 CAPLUS 120:217628 Development of 1,4-benzodiazepine cholecystokinin type

Development of 1,4-benzodiazepine cholecystokinin type Bantagonists
Bock, Mark G.; DiPardo, Robert M.; Evans, Ben E.;
Rittle, Kenneth E.; Whitter, Villie L.; Garsky, Victor M.; Gilbert, Kevin F.; Leighton, James L.; Carson, Kenneth L.; et al.
Dep. Med., Herck Res. Lab., West Point, PA, 19486, USA Journal of Medicinal Chemistry (1993), 36(26), 4276-92 CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: LANGUAGE: English

AUTHOR (5):

A series of 3-(arylureido)-5-phenyl-1,4-benzodiazepines, nonpeptidal antagonists of the peptide hormone cholecystokinin (CCK), are described. Derived by reasonad modification of the CCK-A selective 3-carboxanido-1,4-benzodiazepine, MK-329, the development of potent, orally effective compds. in which selectivity for the CCK-B receptor subtype was achieved. The principal lead structure that emerged from these studied is 1-365,260 (I), a compd. which has been submitted for clin. evaluation. Details of the ability to modulate the receptor interactions of these benzodiazepines by appropriate structure modifications are discussed which imply the possibility of further refining the CCK-B receptor affinity and selectivity of this class of compds.

119487-44-49 119487-58-0P 136051-20-2P 136234-80-5P 145586-67-0P 152665-84-4P 153826-05-P 145986-65-07-D 152665-84-4P 153826-05-2P 153826-16-5P 133924-35-7P 153924-36-8P RL: SFN (Synthetic preparation); PREP (Preparation) (intermediate in prepn. of cholecystokinin type B antagonists) 119487-44-4 CAPLUS Carbanic acid, [1-[2-(diethylamino)-2-oxoethyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

145659-79-6 CAPLUS

Carbamic acid, [1-(cyanomethyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

CH2-CN

145874-82-4 CAPIDS
Carbamic scid, (2,3-dihydro-1-[{5-methyl-1H-1,2,4-triazol-3-yl}methyl]-2-oxo-5-phenyl-1H-1,4-benzodiszepin-3-yl}-, phenylmethyl ester (9CI) (CA

145986-66-9 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, [5-(R*,S*)]- (9CI) (CA INDEX NAME)

L62 ANSWER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

119487-58-0 CAPON 1H-1,4-Benzodiazepine-1-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-3-[[(phenylmethoxy)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

136051-20-2 CAPLUS Carbanic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

136234-80-5 CAPLUS Carbanic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

145986-67-0 CAPLUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, [S-{R*,R*}]- (9CI) (CA INDEX NAME)

152665-84-4 CAPLUS Carbamic acid, [2,3-dihydro-2-oxo-5-{2-pyridinyl}-1H-1,4-benzodiazepin-3-yll-, phenylmethyl ester (9CI) (CA INDEX NAME)

153826-05-2 CAPLUS
Carbanic acid. (2,3-dihydro-1-(2-hydroxyethyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

153826-16-5 CAPLUS
Carbanic acid, [2,3-dibydro-1-(oxiranylmethyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester, [R-[R*,5*]]- [GCI] (CA INDEX NAME)

Absolute stereochemistry.

153924-35-7 CAPTIS Carbanic acid, [2,3-dihydro-2-oxo-1-[2-oxo-2-[1-pyrrolidiny1]ethy1]-5-pheny1-H1-[4-benzodiazepin-3-y1]-, 1-phenylethy1 ester, [5-(R*,R*)]-[9CI] (CA INDEX NAME)

Absolute stereochemistry.

153924-36-0 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-1-[2-oxo-2-[1-pyrrolidinyl]ethyl]-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, 1-phenylethyl ester, [S-[R*,S*]](9CI) (CA INDEX NAME)

L62 ANSWER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

153826-06-3 CAPLUS
Carbamic acid, [2,3-dihydro-1-(oxiranylmethyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 70 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) Absolute stereochemistry.

103373-52-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cholecystokinin type B antagonist activity of)
103373-52-0 CAPUS
Carbanic acid, (5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl}-, phenylnethyl ester (9CI) (CA INDEX NAME)

LS ANSWER 71 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
AGENSION NUMBER: 1993:580835 CAPLUS
TITLE: (Phenylureido) benzodiazepinone antagonists of gastrin
and/or cholecystokinin
Carr, Robin Arthur Ellis; Pass, Martin; Shah, Pritom
Glako Group Ltd., UK
ENT. Pat. Appl., 31 pp.
CODEN: EFXKDW
Patent

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|--------------------|---------------------|-------------------------|--------------------|
| | | | |
| EP 538945 | A1 19930428 | EP 1992-203188 | 19921019 |
| R: AT, E | BE, CH, DE, DK, ES, | FR, GB, GR, IE, IT, LI, | LU, MC, NL, PT, SE |
| WO 9308175 | A1 19930429 | WO 1992-EP2385 | 19921019 |
| W: AT, A | U, BB, BG, BR, CA, | CH, CS, DE, DK, ES, FI, | GR. HII. JP. KP |
| KR, I | K, LU, MG, MN, MW. | NL, NO, PL, RO, RU, SD, | SE. US |
| RW: AT, B | E. CH. DE. DK. ES. | FR, GB, GR, IE, IT, LU, | MC. NI. SP DP |
| BJ, C | F, CG, CI, CM, GA. | GN, ML, MR, SN, TD, TG | 1.0, ML, SE, BF, |
| AU 9227596 | | AU 1992-27596 | 19921019 |
| CN 1074216 | | CN 1992-113397 | |
| | | ZA 1992-8200 | 10021023 |
| PRIORITY APPLN. IN | iro · | GB 1991-22540 | |
| | | | |
| | | GB 1991-22551 | 19911024 |
| | | GB 1991-22591 | 19911024 |
| | | WO 1992-EP2385 | 19921019 |
| OTHER SOURCE(S): | MARPAT 119: | | |

The title compds. I [R1 = CH2CONR4R5, XYR6, Ph, C3-7 cycloslkyl, [un] substituted alkyl; R4, R5 = H, Ph, C1-4 alkyl; NR4R5 = (un] substituted 5-7-membered beterocyclic ring; X = C1-3 (un)branched alkylene; Y = CO, C(OR9)2, C(SR9)2, R9 = C1-3 alkyl; or ZN9 groups together may form a C2-4 alkylene chain; R6 = C1-6 alkyl, (un] substituted Ph, C3-7 cycloalkyl, adamantyl; R2 = NR7SO2CF3, SOZNRTCOR8, CONRSOZR8, R7 = H, C1-4 alkyl; R8 = (un) substituted Ph; n = 0, 1], useful for treating gastrin or cholecystokinin-moderated diseases, are preped. and pharmaceutical formulations contg. I are presented. Thus, 3-amino-2, 3-dihydro-N-methyl-2-cov-N, S-diphenyl-1H-1, 4-benzodizzepine-1-acctanide was coupled with 3-(1H-terrazol-5-yl) benzenamine hydrochloride, forming 2, 3-dihydro-N-methyl-2-cov-N, S-diphenyl-3-[[[]-(H-terrazol-5-yl)phenyl] anino| carbonyl] maino|-1H-1, 4-benzodizzepine-1-acctanide [II]. If demonstrated guines pig cholecystokinin-B antagonist activity in an isolated ileus longitudinal muscle-myenteric plexus prepn. of pXD 11.6.

ANSWER 71 OF 105 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RL: RCT (Reactant), RACT (Reactant or reagent)
(reaction of, in prepn. of (phenylureido)benzodiazepinedione
antagonists of gastrin and/or cholecystokinin)
108895-98-3 CAPUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 72 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) (cyclo) alkyl, (substituted) Ph. phenylalkyl; R7 = Q1-Q5; R18 = H, alkyl; X = O, S, (H, H), maino; X1 = H, ND2, CF3 cyano, OH, halo, alkylthio, alkoxy, X11cO2R6, X11cO2H, X11NRARS; X2 = H, X3; X3 = O(CH2) LOC2R6, OCH2D, CO2R6, X12OR6, etc.; X4 = S, O, CH2, NR8; R8 = H, alkyl; X9 = NR18, O; X11 = null, alkylene; X12, X13 = alkylene; ne 1-6; q = O-4; r = 1, 2], were prepd. Thus, 3R-amino-1,3-dihydro-1-methyl-5-phenyl-2H-1,4-benzodiazepin-2-one and 3-MecCH4NCO were kept 8 h in THF to give the title compd. R-II. This inhibited specific 1251-cholecystokinin-33 brain binding with ICSO = 0.002 .mu.M.

II 136234-80-59
RL: SYN (Synthetic preparation), NPEP (Perspection)

RE: SPN (Synthetic preparation): PREP (Preparation)
(prepn. of, as cholecystokinin and gastrin antagonist)
136234-80-5 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

ΙT

136051-20-2P 146943-26-2P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as intermediate for cholecystokinin and gastrin antagonist) 136051-20-2 CAPLUS Carbamic acid, (2,3-dihydro-1-methyl-2-cxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester, (R)- (9CI) (CA INDEX NAME)

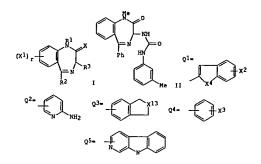
Absolute stereochemistry.

021

146943-26-2 CAPLUS
Carbanic acid, [1-(2-chloroethyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

LAW ANSWER 72 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
1993:428165 CAPLUS
11993:428165 CAPLUS
11111A: 1993:428165 CAPLUS
1111A: 1993:428165 CAPLUS
1112A: 1993:428165 CAPLUS
1111A: 1993:428165 CAPLUS
1111A: 1993:428165 CAPLUS
1112A: 1993:428165 CAPLUS
1112A: 1993:428165 CAPLUS
1111A: 1993:428165 CAPLUS
1111A: 1993:428165 CAPLUS
1112A: 1993:428165 CAPLUS
1111A: 1993:428165 CAPLUS
11 DOCUMENT TYPE: Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. APPLICATION NO. DATE EP 1992-305391 19920612 CA 1992-2071181 19920612 JP 1992-197404 19920615 US 1991-715539 19910614

MARPAT 119:28165

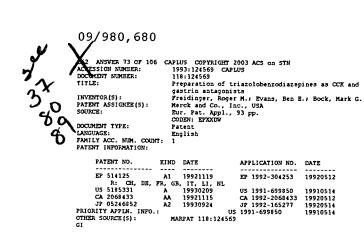


Title compds. [I, R1 = H, alkyl, alkenyl, alkynyl, X12CO2H, X12NR4R5, X12CN, X12COXR4R5, etc.; R2 = H, alkyl, (substituted) Ph. pyridyl; R3 = X11NR18COX11R7, X11COXSYN1R7, X11NR18CO2(CH2)qR7, etc.; R4, R5 = H, R6, NR4R5 = (alkyl-substituted) (benzo-fused) 4-7 membered heterocyclyl; R6 =

L62 ANSWER 72 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

ΙT

106849-47-2
RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in prepn. of cholecystokinin and gastrin antagonist)
106849-47-2 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



Title compds. [I; R1 = H, CH, (cyclo)alkyl, alkenyl, (substituted) Ph, etc.; R2 = H. (carboxy)alkyl, (substituted) Ph, etc.; (CH2)nR7, (CH2)nCOR7, NHCH2CH2NHR7, etc.; R7 = (hetero)aryl(vinyl), etc.; R9,R10 = H, CH, Me; R13 = H, alkyl, acyl, etc.; R8R13 or R10R13 = bond; X1 = H, NO2, CF3, halo, alkyl, etc.; n = 2-6; r = 1, 2] were prepd. Thus, benzodiazepinone II (R2 = 2-FCCH4) (III; R = CO2CH2Ph, X = 0) was converted in 2 steps to III (R = H, X = 5) which was N-acylated by indole-2-carboxylic acid and the product converted to III (R = 2-indolylcarbonyl, X = NHNH2). The latter was cyclocondensed with

L62 ANSWER 73 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

146135-16-2 CAPLUS Carbamic acid, (2-hydrazino-5-phenyl-3H-1,4-benzodiazepin-3-y1)-, phenylmethyl ester (9CI) (CA INDEX NAME)

103373-52-0 108895-98-3
RL: RCT (Reactant): RACT (Reactant or reagent)
(reaction of, in prepn. of CCK and gastrin antagonists)
103373-52-0 CAPLUS
Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

108895-98-3 CAPLUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 73 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
HC(CMe) 3 to give title compd. IV (R2 = 2-FCGH4) which had ICSO of 0.0009
and 0.053 .mm.M against CCK binding at pancreas and brain prepns., resp.,

in vitro. 103195-69-3P 103373-53-1P 146135-15-1P 146135-16-2P

146135-16-2P
RL: RCT (Reactant); SFN (Synthetic preparation); PREF (Preparation); RACT (Reactant or respent)
(prepn. and reaction of, in prepn. of CCK and gastrin antagonists)
103195-69-3 CAPUS
Carbanic acid, [5-(2-fluorophenyl)-2-hydrazino-3H-1,4-benzodiazepin-3-yl], phenylmathyl ester (9CI) (CA INDEX NAME)

103373-53-1 CAPLUS Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

146135-15-1 CAPLUS Carbanic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-y1)-, phenylaethyl ester (9C1) (CA INDEX NAME)

L62 ANSWER 74 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:101998 CAPLUS
DOCUMENT NUMBER: 118:101998
TITLE: Preparation of N-(oxobenzodiazepinyl)ureas as CCK and gatin antagonists
BOCK, Mark G., Freidiner, Roger M.
Herck and Co., Inc., USA
EUR. Pat. Appl., 45 pp.
CODEN: EFXXDW

DOCUMENT TYPE: Patent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | | DATE | APPLICATION NO. | DATE |
|-----------------------|---------|----------------|--------------------|------------|
| | | 19921014 | EP 1992-303191 | 19920409 |
| EP 508796 | | | | |
| R: AT, BE, | CH, DE, | DK, ES, FR, G | B, GR, IT, LI, LU, | NL, PT. SE |
| US 5220018 | A | 19930615 | US 1992-848790 | 19920310 |
| IL 101514 | A1 | 19960131 | IL 1992-101514 | 19920407 |
| CA 2066083 | AA | 19921011 | CA 1992-2066083 | 19920408 |
| CA 2066083 | C | 20021009 | | |
| AU 9214798 | Al | 19921119 | AU 1992-14798 | 19920409 |
| AU 662322 | B2 | 19950831 | | |
| ZA 9202586 | A | 19930331 | ZA 1992-2586 | 19920409 |
| AT 168103 | E | 19980715 | | |
| ES 2117654 | Т3 | 19980816 | ES 1992-303191 | 19920409 |
| JP 06087838 | | | JP 1992-135544 | |
| JP 3012086 | | 20000221 | | |
| HK 1011016 | A1 | 20000519 | HK 1998-111885 | 19981110 |
| LV 12314 | В | 19991120 | | 19990427 |
| PRIORITY APPLN. INFO. | | | 1991-683007 A | |
| | | | 1991-764277 A | |
| | | | | 19920310 |
| OTHER SOURCE(S): | MAP | PAT 118:101998 | | |

MARPAT 118:101998

Title compds. [I; R = arylcarbamoyl; Rl = H, l or 2 halo or Me; R2 = (substituted) Ph; R3 = alkyl, cyclopropylnethyl] were prepd. Thus, I (Rl = H, R2 = Ph) (II; R = R3 = H) was condensed with carbonyldianidazole and (S)-PhcDN+oON and the diasteromeric carbamates sept. to give, after N-alkylation and deprotection, (R)-II (R = H, R3 = CHZCDN+O) which was condensed with the isocyanate prepd. from 3-amino-(H-tetrazol-5-yl)benzene (preps. given) to give II (R = CONHCSHRN+3; R3 = CHZCHN+O, R4 = IH-tetrazol-5-yl). The latter had ICSO of 0.0001 .mu.M against CCK binding at guinea pig cerebral cortex preps.

L62 ANSWER 74 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
17 145986-67-0P
RL: SFN (Synthetic preparation); FORM (Formation, nonpreparative); FREP (Preparation)

(Preparation)
(formation of, in prepn. of CCK and gastrin antagonists)
14598-67-0 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
1-phenylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

145878-29-1P 145986-66-9P

145978-29-19 145986-66-99 RE: RCT (Reactant): SFN (Synthetic preparation): FREP (Preparation): RACT (Reactant or reagent) (prepn. and reaction of, in prepn. of CCK and gastrin antagonists) 145978-29-1 CAPUS Carbanic acid, (2,3-dihydro-1-(2-methylpropyl)-2-oxo-5-phenyl-1H-1,4-benzodizzepin-3-yl]-, 1-phenylethyl ester, (S-{R*,S*})- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

145986-66-9 CAPLUS Carbanic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 1-phenylethyl ester, (5-(R*,5*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 75 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:101997 CAPLUS
DOCUMENT NUMBER: 118:101997
TITLE: 118:101997
TITLE: 3 robust of N-(2-oxo-1,4-benzodiazepin-3-y1)ureas as cholecystokinin and gastrin antagonists
BOCK, Mark G. Preidinger, Roger M. ,
Merck and Co., Inc., USA
EUC. Pat. Appl., 22 pp.
CODEN: EPYKIW
Fatent
Fatent

19920310

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE EP 508797 A1 19921014
R: CH, DE, FR, GB, IT, LI, NL
US 5218115 A 19930608
CA 2065703 AA 19921011
JP 06080650 A2 19940322
PRIORITY APPLN. INFO.: EP 1992-303192 19920409 US 1992-848820 CA 1992-2065703 JP 1992-135545 US 1991-683387 US 1991-763719 19920310 19920408 19920410 19910410

US 1992-848820 MARPAT 118:101997 OTHER SOURCE(S):

Title compds. [I; R = 2- or 4-imidazolyl, pyrrolidinocarbonyl, 5-methyl-1,2,4-triazol-2-yl; Rl = m-toluidino, 1-naphthylmethyl, 6-chloro- or- methoxy-3-pyridylamino, etc.; R3 = H, 1 or 2 halo or Me; R5 = (substituted) Ph; Z= (CK2) 1-31 were prept. Thus, I (R = H, R1 = CK12Ph, R3 = H, R5 = Ph, Z = bond) was condensed with 1-(2,4- dinitrophenyl)-4-(chloromethyl)inidazole (preph. given) and the 3-N-deprotected product condensed with 3-HeCKH8NCO to give, after deprotection, I (R = IH-imidazol-4-yl, Rl = 3-N+CCKH8NH, R3 = H, R5 = Ph, Z = CK2) which had ICSO of 0.011 and 0.0079 .mu.M against CCK binding at rat pancreas and guines pig brain prephs., resp., and 0.0036 .mu.M against 145574-67-59 145574-71-19 145574-76-69 145574-80-29 145574-80-3-39 145574-2-2-49 RL: RCT (Reactant): FSN (Synthetic preparation): PREF (Preparation): RACT (Reactant or reagent) (prepn. and reaction of, in prepn. of CCK and gastrin antagonists) 145374-67-5 CRPUS Carbanic acid. [1-[1-(2,4-dinitrophenyl)-1H-inidazol-4-yl]methyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 74 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 75 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

145874-71-1 CAPLUS
Carbamic acid, [2,3-dihydro-2-oxo-1-[2-oxo-2-(1-pyrrolidinyl)ethyl]-5phenyl-1H-1,4-benzodiazepin-3-yl]-, 1-phenylethyl ester [9CI] (CA INDEX
NAME)

145874-76-6 CAPLUS
Carbanic acid, [1-{[1-(2,4-dinitrophenyl)-1H-inidazol-2-yl}methyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 75 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

145874-80-2 CAPLUS
Carbamic acid, [1-(acetylanino)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylnethyl ester (SCI) (CA INDEX NAME)

145874-81-3 CAPLUS
Carbanic acid, [1-[2-[[1-(dimethylamino)ethylidene]amino]-2-oxoethyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester

145874-82-4 CAPLUS
Carbamic acid, [2,3-dihydro-1-[(5-methyl-1H-1,2,4-triazol-3-yl)methyl]-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA

L62 ANSWER 75 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

108895-98-3 145874-72-2
RL: RCT (Reactant) RACT (Reactant or reagent)
(reaction of, in prepn. of CCK and gastrin antagonists)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmathyl ester (9CI) (CA INDEX NAME)

145874-72-2 CAPLUS
Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
1-phenylethyl ester (9CI) (CA INDEX NAME)

ANSWER 76 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
SION NUMBER: 1993:101996 CAPLUS
ENT NUMBER: 118:101996
: Preparation of N-(cxobenzodiazepinyl)ureas as CCK and gastrin antagonists
TOR(S): Bock, Mark G., Freidinger, Roger M., Dipardo, Robert

INVENTOR(S):

M.
Merck and Co., Inc., USA
Eur. Pat. Appl., 18 pp.
CODEN: EPOXIW
Patent
English
1

PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE

EP 508799 A1 19921014

R: CH, DE, FR, GB, IT, LI, NL
US 5218114 A 19930608
CA 2065715 AA 19921011
JP 06080649 A2 19940322
PRIORITY APPLN. INFO.: APPLICATION NO. DATE EP 1992-303194 19920409 US 1992-848794 US 1992-048794

AA 19921011 CA 1992-2065715

A2 19940322 P 1992-135543

US 1991-663005
US 1991-763732
US 1992-848794

MARPAT 110:101996 19920310 19920408 19920410 19910410 19920310 OTHER SOURCE(S):

Title compds. [I; R = 2- or 4-imidazolylmethyl, CH2CHClCH2OH,
CH2CH(OH)CH2NMe2, etc., R2 = H, 1 or 2 halo or Me; R3 = (substituted) Ph;
R4 = NHCONHCGHC1-4] were prepd. Thus, I (R2 = H, R3 = Ph)(II; R = H, R4
- NHCOCHPPh) was N-alkylated with (S)-(-)-glycidyl 3nitrobenzenesulfonate and the deprotected product condensed with
4-ClCGHSNOC to give, after NH2OH.HC1 treatenet, II [R = CH2CH(OH)CH2Cl, R4
- NHCOCHCCH4Cl-4] which had IC50 of 0.062 EM against CCK binding at guinea
pig cerebral cortex prepn.
145659-79-69 145659-89-89 145659-82-19
145659-79-21 145659-89-89 145659-93-49
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of, in prepn. of CCK and gastrin antagonists)
145659-79-6 CAPLUS
Carbanic acid, [1-(cyanomethyl)-2,3-dihydro-2-oxo-5-phenyl-1H-1,4benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 76 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

145659-80-9 CALLS
Carbanic acid, [2,3-dihydro-2-oxo-5-phenyl-1-(IH-tetrazol-5-ylmethyl)-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

145659-82-1 CAPLUS
Carbamic acid, [2,3-dihydro-1-(oxiranylmethyl)-2-oxo-5-phemyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester, [5-(R*,5*)]- (9CI) (CA INDEX NAME)

145659-83-2 CAPLUS Carbanic acid, [2,3-dihydro-1-[2-hydroxy-3-(1H-pyrrol-1-y1)propy1]-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1]-, phenylnethyl ester, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 76 OF 106 CAPLUS COPYRIGHT 2003 ACS OD STN (Continued)

145659-89-8
Carbanic acid, [2,3-dihydro-1-[2-hydroxy-3-(IH-pyrrol-1-y1)propyl]-2-oxo-5phenyl-IH-1,4-benzodiazepin-3-y1]-, phenylmethyl ester, [S-(R*,R*)]- (9CI)

Absolute stereochemistry.

145659-93-4 CAPLUS-Carbanic acid, [2,3-dihydro-1-(oxiranylnethyl)-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylnethyl ester, [S-{R*,R*}]- (9CI) (CA INDEX NAME)

108895-98-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of CCK and gastrin antagonists)

L62 ANSWER 77 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1993:101995 CAPLUS DOCUMENT NUMBER: 118:101995

Preparation of 1- or 3-substituted chlonazepam derivatives as haptens and antigens for immunoassay of

chlonazepam Kanehiro, Masahiko: Akita, Tatsuo; Yajima, Ryuichi; Kumagai, Yasuyuki; Nakaya, Miho Dainabot Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 18 pp. CODEN: JXOXAF INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A2 19920722 JP 04202186 JP 1990-330156 19901130 PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI JP 1990-330156 MARPAT 118:101995

The title compds. (II one of Rl, R2 = H, the other = RZQ; R = Cl-10 linkage group contg. a hetero atom and a linear or branched chain contg. .ltoreq.10 heteroatoms in which .gtoreq.2 of the hetero atoms are not directly bonded to each other; Z = CO, C:RH, MH, RMe, NH, SQ2, CHZ; Q = H, HO, halo, acyloxy, N-succinylimidoxy, N-phthalimidoxy, alkoxy, (un) substituted PhO, N-inidacolyl, 1-benzotizoryloxy, polyamino acid or its deriv., or other antiqen carrier, labeled compd.] are prepd. as antiqens for enzyme immunossay, RIA, and fluorescence immunossay of chlonazepan in the treatesant plan using chlonazepan as an anticonvulsant. Preferred compds. are 1 (Q = bovine serum albumin, fluorescent substance, fluorescent, enzyme, radioactive material). Thus, 108 mg chlonazepan was stirred with MeONa in MeOH-MHP at room temp. thereto 276 .mm.L BTCH2COZCHOSI was added, and the mixt. was stirred overnight at room temp. to give 888 I (RI = CH2COZCHe), R2 = H) This (37.4 mg) was esterified with N-hydroxysuccininide in the presence of DCC in DMF-dioxane to give an active ester soln. which was reacted with aq. soln. of 110 mg bovine serum albumin adjusted to pH 8.5 with 0.1N NaOH while maintaining the same pH to give, after dialysis and freeze dry, antigen I (RI = CH2COZQ, Q = bovine serum albumin, R2 = H). Inculation of nice with this antigen produced anti-chlonazepan monoclonal antibody which showed cross-reactivity 100, <0.1, and 208 to chlonazepan, metabolites

Page 84

ANSWER 76 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 108895-98-3 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-phenylmethyl ester (9CI) (CA INDEX NAME)

ANSWER 77 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
145741-29-3P 145741-30-6P 145741-31-7P
RL: SPN (Synthetic preparation); PREP (Freparation)
(prepn. of, as hapten for immunoassay of chlonazepam)
145741-29-3 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 5-(2-chlorophenyl)-2,3-dihydro-7-nitro-2-oxo-, (S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

145741-30-6 CAPLUS IH-1,4-Benzodiazepine-3-propanoic acid, 5-(2-chlorophenyl)-2,3-dihydro-7-nitro-2-oxo-, (5)- (9CI) (CA INDEX NAME)

145741-31-7 CAPLUS
1H-1,4-Benzodi azepine-3-propanoic acid, 5-(2-chloropheny1)-2,3-dihydro-7-nitro-2-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

145741-40-89 145741-42-09 145741-45-39 RL: SPN (Synthetic preparation); PREP (Preparation)

L62 ANSWER 77 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

(prepn. of, as internadiate for hapten and antigen for imminoassay of chonazepan)

RN 145741-40-8 CAPLUS

CN 1H-1,4-Denizodiazepine-3-acetic acid, 5-{2-chlorophenyl}-2,3-dihydro-2-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

145741-42-0 CAPLUS 1H-1,4-Benrodiazepine-3-propanoic acid, 5-(2-chlorophenyl)-2,3-dihydro-2-oxo-, (S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

145741-45-3 CAPLUS 1H-1,4-Benzodiazepine-3-propanoic acid, 5-(2-chlorophenyl)-2,3-dihydro-2-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 78 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:80957 CAPLUS
DOCUMENT NUMBER: 118:80957 CAPLUS
I18:80957 CAPLUS
INFRANCIS (S): Preparation of N-(oxobenzodiazepinyl) ureas as CCK and gastrin antagonists
BOCK, Hark G., Freidinger, Roger M.
Merck and Co., Inc., USA
DUT. Pat. Appl., 14 pp.
COUMENT TYPE: LANGUAGE: PXXXVV
Patent
LANGUAGE: PXXXVV
Patent
English
FAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|--|----------------------------|-----------------------------------|----------------------|
| EP 508798 R: CH. DE. | A1 19921014 | EP 1992-303193 | 19920409 |
| R: CH, DE, US 5220017 CA 2065704 | A 19930615 | US 1992-848789 | 19920310 |
| JP 05255279 | AA 19921011 A2 19931005 | CA 1992-2065704 JP 1992-135541 | 19920408 19920410 |
| PRIORITY APPLN. INFO | . : | US 1991-683407 US 1991-812876 | 19910410 19911220 |
| OTHER SOURCE/S) . | MADDAT 110.0 | US 1992-848789 | 19920310 |

Title compds. [I; R1 = H, CH2CH2CO2Me, CH2CH2CO2H; R2 = CONRSCH2CH2CO2CH, CONRRS; R3 = H, 1 or 2 halo or Me; R5 = 3-MecGH4, 4-ClCGH4, 5-indanyl; R6 = (substituted)Ph) were prepd. Thus, I (R3 = H, R6 = Ph) (II; R1 = R2 = H) was N-alkylated with ICH2CH2CO2Me and the product condensed with 3-MecGH4NCO to give, after sapon., II (R1 = CH2CH2CO2H, R2 = CONNCGH4Ne-3) which had ICSO of 0.51 .mm.M against CCK binding at guinea pig cerebral cortex prepn. 145547-62-2P 145547-63-3P RL: RCT (Reactant), SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction of, in prepn. of CCK and gastrin antagonists) 145547-62-2 CAPLUS .beta.-Alanine, N-(2,3-dibydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, methyl ester (SCI) (CA INDEX NAME)

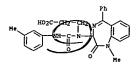
L62 ANSWER 77 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 78 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

145547-63-3 CAPLUS .beta.-Alanine, N-(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-N-[[(3-methylphenyl)amino]carbonyl]-, methyl ester (9CI) (CA INNEX NAME)

ΙT 145547-64-4P

145547-64-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepa. of, as CCK and gastrin antagonist)
145547-64-4 (CAPLUS
.beta.-Alanine, N-(2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-N-([(3-methylphenyl)amino)carbonyl)- (9CI) (CA INDEX NAME)



ANSVER 79 OF 106 CAPLUS COPYRIGHT 2003 ACS ON STN SSION NUMBER: 1992:634550 CAPLUS 117:234550 ACCUSSION NUMBER: DOCUMENT NUMBER: TITLE:

117:234550
Anino acid analogs as CCK antagonists.
Horvell, David Christopher, Aranda, Julian;
Augelli-Szafran, Corinne Elizabeth; Betche, Hans
Jurgen; Holmes, Ann; Mullican, Michael David;
Pritchard, Martyn Clive; Richardson, Reginald Stevart;
Roth, Bruce David; et al.
Varner-Lambert Co., USA
PCT Int. Appl., 209 pp.
CODEN: PIXOD2
Patent
English INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

L62 ANSWER 80 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1992:531235 CAPLUS
117:131235 New benzodiazepine analogs with cholecystokinin receptor antagonistic activity.
INVENTOR(S): Bock, Mark G., Evans, Ben E., Freidinger, Roger M.
PATEMT ASSIGNEE(S): Service And Co., Inc., USA
EUL. Pat. Appl., 24 pp.
COUMENT TYPE: PATEMT INFORMATION:
English
FAMILY ACC. NUM. COUNT: 1
PATEMT INFORMATION:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE

EP 490590 Al 19920617
R: CH, DE, FR, GE, IT, L1, NL
CA 2058809 AA 19920608
JP 05025146 A2 19930202
PRIORITY APPLN. INFO.: APPLICATION NO. DATE EP 1991-311364 ... 19920608 CA 1991-2056809 A2 19930202 JP 1991-322023 US 1990-622473 US 1991-718488 MARPAT 117:131235 19911206

OTHER SOURCE(S):

Benzodiazepinones I [R] = carboxy-, amino-, carbamoyl-, cyano-, (un)etherified alkomyalkyl; R2 = alkyl, (un)substituted Ph, pyridyl; R3 = acylamino; R9, R10 = H, H0, Me; R13 = alkyl, acyl, cycloalkyl; R9R10, R10R13 = bond; X1 = H, 62N, C73, cyano, H0, alkyl, alkomy, alkylhio, halo, carboxy, carboxyalkyl, carboxyalkoxy; X7 = 0, S, H2, NH, substituted NH; n = 1, 2; p = 0, 1] and their 4-oxides were prepd. Thus, urea II was prepd. by condensation of (R5)-1,3-dihydro-1-methyl-3-(p-nitrophenoxycarboxyl)amino-5-phenyl-ZH-1,4-benzodiazepin-2-one with 2-HZNCGH4COZH in the presence of EL3N in DMF. II bound to cholecystokinin receptors from pancreas, brain and gastric glands with ED50's of 0.049, 0.0039, 0.009, mu.M resp.
136051-20-2
R1: RCT (Reactant); RACT (Reactant or reagent) (condensation of, with aminobenzoate, urea from)

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L62 ANSWER 79 OF 106 CAPLUS COPYRIGHT 2003 ACS OR STN (Continued)

142910-52-9 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 2,3-dihydro-.alpha.,1-dimethyl-2oxo-5-phenyl-.alpha.-[{[tricyclo[3.3.1.13,7]dec-2-yloxy)carbonyl]amino]-,
methyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 80 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CN Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

108895-98-3
RL: RCT (Reactant): RACT (Reactant or reagent)
(hydroxyethylation of, with oxirane)
108895-99-3 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9Cl) (CA INDEX NAME)

136051-18-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
 (prepn. and addn. reaction of, with methoxyphenylisocyanate, urea from)
136051-18-8 CAPLUS
Carbamic acid, [1-[2-(dimethylamino)ethyl]-2,3-dihydro-2-oxo-5-phenyl-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RL: SPN (Synthetic preparation); PREP (Preparation) (preps. and condensation of, with amines, ureas from) 136234-80-5 CAPLUS

AMSYER 80 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
Carbanic acid, (2,3-dibydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

ANSWER 81 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 108895-98-3 CAPLUS (Continued)

Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

136234-80-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and condensation of, with aminobenzoate, in prepn. of
cholecystokinin and gastrin antagonist)
16234-80-5 CAPLIS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3yl)-, 4-nitrophenyl ester (SCI) (CA INDEX NAME)

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as cholecystokinin and gastrin antagonist
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for cholecystokinin and gastrin antagonist

INVENTOR(S):

DOCUMENT TYPE:

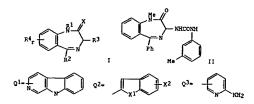
LANGUAGE:

DOCUMENT TYPE:

LANGUAGE:

PATENT AND THE PATENT AND TH 80 inventor(s):

KIND DATE EP 434369 A1 19910626 EP 1990-313854
R: AT, EE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NI,
CA 2032226 AA 19910619 CA 1990-2032226 I
JP 06065215 A2 19940308 JP 1990-419339 J
PRIORITY APPLM. INFO.: US 1989-452012
US 1990-621500
OTHER SOURCE(S): MARPAT 115:183378 19901218 IL, SE 5 19901213 19901218 OTHER SOURCE(S):



Title compds. 1; R1 = H, alkyl, alkenyl, alkynyl, carboxyalkyl, cyanoalkyl, carbamoylalkyl, aninoalkyl, etc.; R2 = H, alkyl, (substituted) Ph, pyridyl; R3 = NM(CH2)2-NMHCOR5, X3CCXKX3R5, etc.; R4 = H, NO2, C73, Cyano, G1, alkyl, halo, alkylthio, alkoxy, carboxyalkyl, aninoalkyl), etc.; R5 = Q1-Q3, (substituted) Ph, etc.; X = O, S, NH, H2, alkylinino; X1 = S, O, CH2, inino; X2 = H, (modified) carboxy, carboxyalkoxy, carboxyalkyl, etc.; X3 = null, alkyl; X4 = O, inino; r = 1,2) were prepd. Thus, 3-MeCGHMCO and (3R)-amino-1,3-dihydro-1-methyl-5-phenyl-ZH-1,4-benzodiazepin-2-one were stirred 8 h in THF at room temp. to give (R)-II. The latter inhibited 1251-CCK-33 binding to guinea pig cerebral cortex preps. with IC50 of O.02 .mu.M.
108895-98-3
RE: RCI (Reactant); RACI (Reactant or reacent)

RL: RCT (Reactant); RACT (Reactant or reagent) (condensation of, with ethylene oxide)

L62 ANSWER 82 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1991:559189 CAPIUS
115:159189
TITLE:
PRIENT ASSIGNEE(S):
SOURCE:
BOCKMENT TYPE:
LANGUAGE:
CODEN: EPXXDW
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
191:559189 CAPIUS
DOCUMENT TYPE:
APX TO BE TO BE

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE EP 434364 A2 19910626 EP 1990-313847 19901218
EP 434364 A3 19920401
R: AT, EE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
CA 203222 AA 19910619 CA 1990-2032222 19901213
AU 9068151 A1 19910620 AU 1990-68151 19901217
AZ 9010124 A 19910925 ZA 1990-10124 19901217
JP 06009580 A2 19940118 JP 1990-419340 19901218
ARTY APPLN. INFO:: US 1989-452023 19891218 PRIORITY APPLN. INFO.: OTHER SOURCE(S):

Title compds. [1] R1 = H, alkyl, cycloalkylalkyl, aminoalkyl, alkoxyalkyl, carbamoylalkyl, etc.; R2 = (aubstituted) Ph, pyridyl, alkoxycarbomylalkyl, etc.; R3 = NHCORS, NHCONHRS, CORS, NHOCHERS; R4 = H, NO2, CF3, alkyl, halor R5 = naphthyl, (substituted) Ph, pyridyl, indolyl, stryrl, 2-aminopyridyl, etc.; R6 = H, OH; r = 1,2], were prepd. Thus, 35-3-amino-1,3-dihydro-3-(2-indolecarbomylamino)-1-methyl-5-phenyl-ZH-1,4-benzodiazepin-2-one in CHZC12 was treated with Z-indolecarbomyl chloride and Et1N and the mixt. was stirred 30 min to give title compd. 35-II. The latter at 0.05-5.0 .mm.g/kg s.c. in mice was an effective anxiolytic in the black/white exploration test of Cravley, and at 0.1 mg/kg s.c. in rats increased exploratory activity in novel environments.

H2: RCT (Reactant); RACT (Reactant or reacent)

136051-20-2

Ri: RCT (Reactant): RACT (Reactant or reagent)
(condensation of, with manino-.beta.-carboline, in prepn. of
cholecystokinin and gastrin antagonist)
136051-20-2 CAPIUS
Carbanic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1R-1,4-benzodiazepin-3yl)-, 4-nitrophenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L62 ANSWER 82 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

136051-20-2P 136234-80-5P
RL: SFN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for cholecystokinin and gastrin antagonist)
136051-20-2 CAPIUS
Carbanic acid, (2, 3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

136234-80-5 CAPLUS
Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

136162-68-0

lablaz-beru RE: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in prepn. of cholecystokinin and gastrin antagonist) 136(62-68-0 CAPLUS Carbamic acid, [2,3-dibydro-1-(2-methylpropyl)-2-oxo-5-(2-pyridinyl)-1H-

L62 ANSWER 83 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1991:536128 CAPLUS
DOCUMENT NUMBER: 115:136128
ITILE: 115:136128
Preparation of benzodiazepine analogs as cholecystokinin and gastrin antagonists
BOCK, MARK G., Evans, Ben E.; Freidinger, Roger M.
BOCK, MARK G., Evans, Ben E.; Freidinger, Roger M.
BULP RAIL ADDI., 23 pp.
CODEN: EPOXOW
PATENT INFORMATION:
English
TAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 434360 Al 19910626 EP 1990-313837 19901218
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
CA 2023427 AA 19910619 CA 1990-202427 19901217
JP 06009579 A2 19940118 JP 1990-419338 19901218
PRIORITY APPLM. INFO. US 1989-452026 19891218
GI HARPAT 115:136128

Title compds. [I, R1 = (substituted) carboxyalkyl, aminoalkyl, cyanoalkyl, alkoxyalkyl, etc.; R2 = H, alkyl, (substituted) Ph, pyridyl; R3 = NH(CH2) 2-3MHOR7, XIINRISCOXIIR7, etc.; R7 = naphtbyl, (substituted) Ph, pyridyl; X1 = NH(CH2) 2-3MHOR7, XIINRISCOXIIR7, etc.; R7 = naphtbyl, (substituted) Ph, pyridyl; stryrl, indolyl, aninopyridyl, etc.; R9, R10 = H, OH, NE; X1 = H, NO2, CF3, CN, CH, alkyl, halo, alkylthio, alkoxy, carboxy(alkyl), anino(alkyl), etc.; X7 = O, S, H2, iminor dotted line = optional double bond; y = 1, 2; p = 0, 1], were prepd. Thus, 1,3-dihydro-3-(benzyloxycarboxyl) amino-5-phenyl-2H-1,4-benzodiazepin-2-one was stirred 1 h with NaH in DHF in the cold CICHZCHZNHEZ was added followed by stirring for 1 h in the cold and 8 h overnight at arbient tesp. The coupling product was hydrogenolyzed to give the free amine, which was acylated with 3-MeoCGHINKO to give title compd. II. I inhibited 1251-CCK binding to quinea pig cerebral cortex preps. with ICSO of 0.002-0.9100 .m.M.
136051-20-2
RALINE CREACTAIL) RACT (Reactant or reagent) (condensation of, with (aminophenyl) acetate)
136051-20-2 CAPLUS
Carbanic acid, (2,3-dihydro-1-nathyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yllute stereochemistry.

Absolute stereochemistry.

Page 88

L62 ANSWER 82 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 83 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

ΙT

136051-18-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenolysis of, in prepn. of cholecystokinin and gastrin antagonists)
136051-18-8 CAPLUS
Carbamic acid, [1-[2-(dimethylamino)ethyl]-2,3-dihydro-2-oxo-5-phenyl-1H1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

ANSVER 94 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
CESSION NUMBER: 1991:449647 CAPLUS
115:49647

115:49647
Synthesis of new benzodiazepine derivatives as potential cholecystokinin antagonists
Varnavas, Antonios Rupena, Faolos Lassiani, Lucia; Boccu, Enrico
Dip. Sci. Farm., Univ. Trieste, Trieste, 34127, Italy
Farmaco (1991), 46(2), 391-401
CODEN: FRNCES; ISSN: 0014-827X

CORPORATE SOURCE:

DOCUMENT TYPE: LANGUAGE: GI Journal

AUTHOR(S):

3(R,S)-Amino-1,3-dihydro-1-methyl-5-phenyl-2H-1,4-benzodiazepin-2-one derivs. I (R = CH(NH2)CH2C6H4CH-4, C6H4CH-2, CH2C6H4CH-4, C6H3(CH)2-2,5, C6H2(CH)3-3,4,5, 3-hydroxyl-naphthyl) were synthesized as potential cholecystokinia antagonists. In particular, these compds. were obtained by coupling aminobenzodiazpine II (R1 = Me, R2 = H) with RCOZH or DL-PhCH2CCCHNCH(CCCH4CH4-4. An alternative methylation procedure performed on II (R1 = M, R2 = PhCH2C0ZC) allowed the key intermediate II (R1 = Me, R2 = PhCH2C0ZC) to be obtained with a remarkable increase in yield.

yield. 108895-98-3 ΙŤ

NoBSS-98-3 RE: RCT (Reactant); RACT (Reactant or reagent) (methylation of) 108895-98-3 CAPLUS Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

IT 106849-47-2P

L62 ANSWER 85 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
1991:74697 CAPLUS
114:74697
ITILE: Choleystokinin-A receptor ligands based on the kappa.-opioid agonist tifluadom [Erratum to document cited in CA112(5):30228d]
AUTHOR(S): Bock, Mark G., DiPardo, Robert M.; Evans, Ben E.;
Rittle, Kenneth E.; Whitter, Willie L.; Veber, Daniel F.; Freidinger, Roger M.; Chang, Raymond S. L.; Chen, T. B.; Lotti, Victor J.
Dep. Med. Chem., Herck Sharp and Dohme Res. Lab., West Point, PA, 19486, USA
SOURCE: DOCUMENT TYPE:
LANGUAGE: English

CODEN: JMCMAR; ISSN: 00Z2-Ze23

DOCUMENT TYPE: Journal
LANGUAGE: English
AB An error in structure 2 has been cor. The error was reflected in the index entries.

IT 123903-96-89
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of (Erratum))
RN 123903-96-8 CAPLUS
CN Carbamic acid, {(2,3-dihydro-5-phenyl-2-thicwo-1H-1,4-benzodiazepin-3-yl)methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

103343-40-4P 103343-75-5P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of and cholecystokinin A receptor antagonism by, atructure in relation to (Erratum))
103343-40-4 CAPUS
Carbamic acid, [15-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

103343-75-5 CAPLUS

103343-75-5 CAPLUS
Carbanic acid, [[5-(2-fluorophenyl]-2,3-dihydro-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester [9Cl] (CA INDEX NAME)

Page 89

L62 ANSWER 84 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepa. and deprotection of)
RN 106849-47-2 CAPLUS
CN Carbanic acid, (2,3-dihydro-1-methyl-2-cxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylnethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 85 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 86 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1990: S71988 CAPLUS DOCUMENT NUMBER: 113:171988 CAPLUS CUPTING PARTICIPATION OF THE PARTICIPATION OF THE

113:171988
Curtius rearrangement in the 5-phenyl-1,4benzodiazepine series. Unprecedented participation by
an imine nitrogen
Bock, Mark G.; DiPardo, Robert M.; Carson, Kenneth G.;
Freidinger, Royer M.
Herck Sharp and Dohne Res. Lab., West Point, PA,
19486, USA AUTHOR (5): CORPORATE SOURCE:

Journal of Heterocyclic Chemistry (1990), 27(3), 631-6 CODEN: JHICAD: ISSN: 0022-152X SOURCE:

DOCUMENT TYPE:

Journal English CASREACT 113:171988 OTHER SOURCE(S):

The previously unknown 3-aminomethyl-1,3-dihydro-5-(2'-fluorophenyl)-2H-1,4-benzodiazepin-2-one, was synthesized in two steps as a racenate. In the chiral series, 3(5)-azidocarbonylmethyl-1,3-dihydro-5-phenyl-2H-1,4-benzodiazepin-2-one (1) was prepd. from N.alpha.-CDz-.beta.

methylaspartate in five synthetic operations and subjected to Curtius rearrangement. The intermediate isocyanate was trapped intramolecularly by the 5-inime nitrogen of the benzodiazepine ring in I. This unanticipated result runs counter to the generally held dictum that the isocyanate group has a strictly linear shape.

RL: SPN (Synthetic preparation): PREP (Preparation)
(prepn. and conversion of, to hydrazide)
129749-01-5 CAPUUS
1H-1,4-Benzodiazepine-3-acetic acid, 2,3-dihydro-2-oxo-5-phenyl-, methyl
ester, (S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

AUTHOR (S):

ANSWER 87 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
SION NUMBER: 1990:30228 CAPLUS

112:30228

112:30228

CR(S): Cholecystokinin-A receptor ligands based on the
. Kappa.-opioid agonist tifluadom

OR(S): Bock, Mark G., DiPardo, Robert M., Evans, Ben E.,
Rittle, Kenneth E., Whitter, Willie L., Veber, Daniel
F., Freidinger, Roger M., Chang, Raymond S. L.; Chen,
T. B., Lotti, Victor J.

ORATE SOURCE: Dep. Hed. Chen., Merck Sharp and Dohme Res. Lab., West
Point, PA, 19486, USA

CE: Journal of Medicinal Chemistry (1990), 33(1), 450-5

CODEN: JMCMAR; ISSN: 0022-2623

CORPORATE SOURCE:

SOURCE: Journal of Medicinal Chemistry (1990), 33(1), 450-5
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Tifluadom, a .kappa.-opioid agonist and cholecystokinin-A (CCK-A) receptor
antagonist, was utilized as a model to prep. a series of 2-(aminomethyl)and 3-(aminomethyl)-1,4-benzodiazepines. These compds. were tested in
vitro as inhibitors of the binding of [1251]CCK to rat pancreas and guinea
pig brain receptors. All compds. with IC50's <100 .m.M proved to have
greater affinity for the CCK-A receptor, with the most potent analog
having an IC50 of 0.16 .m.M. The benzodiazepines described in this study
are simultaneously CCK-A and opioid receptor liquads. The ramification of
this dichotomy on current concepts of peptide hormone action are
discussed. These results further demonstrate the versatility of the
benzodiazepine core structure for designing nonpeptide liquads for peptide
receptors and the ability to fine-tune the receptor interactions of these
benzodiazepines by appropriate structure modifications.

IT 12390-96-8 CRPLUS
RN [Reactant' or reagent)
(prepn. and redn. of)
RN 12390-96-8 CRPLUS
CN Carbamic acid, [(2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3yl)methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

-40-4P 103343-75-5P

10343-40-49 10343-75-59
RE: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of and cholecystokinin A receptor antagonism by, structure in relation to)
103343-40-4 CAPUS
Carbanic acid, [(5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9C1) (CA INDEX NAME)

L62 ANSWER 86 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

129749-05-99
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion of, to urea deriv. or
inidazolidone(benzoylphenyl)carboxamide)
12979-05-9 CAPUUS
Carbanic acid, ([2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)matbyl]-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 87 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

103343-75-5 CAPLUS
Carbamic acid, [[5-{2-fluorophenyl}-2,3-dihydro-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

- ин- сн2

L62 ANSWER 88 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:197296 CAPLUS
COFFECTION OF: 1987:67359
DOCUMENT NUMBER: 111:97296

Correction of: 106:67359
Benzodiazepine derivatives and their pharmaceutical TITLE: Beancodiazepine derivatives and their pharmaceutical use Freidinger, Roger M.; Bock, Mark G.; Evans, Ben E. Merck and Go.; Inc., 1988. Eur. Pat. Appl., 290 pp. CODEM: EPXXDV Patent English 2 2

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE | |
|-----------------------|------|----------|---------------------------|--|
| EP 167919 | A2 | 19860115 | EP 1985-107842 19850625 | |
| EP 167919 | A3 | 19861105 | EP 1985-107842 19850625 | |
| EP 167919 | B1 | 19930505 | | |
| | | | IT, LI, LU, NL, SE | |
| CA 1332410 | A1 | 19941011 | 11, LI, LU, NL, SE | |
| NO 8502558 | λ. | 19851227 | | |
| NO 173651 | B | | NO 1985-2558 19850625 | |
| NO 173651 | | | | |
| AU 8544152 | | 19940112 | | |
| DK 8502872 | | 19860102 | AU 1985-44152 19850625 | |
| ES 544523 | Α. | 19860225 | | |
| AT 88998 | | 19870416 | - 1100 511525 13050025 | |
| | E | 19930515 | AT 1985-107842 19850625 | |
| ZA 8504764 | A | 19860226 | | |
| JP 61063666 | A2 | 19860401 | JP 1985-138064 19850626 | |
| ES 551504 | A1 | 19870601 | | |
| US 5004741 | λ | 19910402 | | |
| AU 8944563 | A1 | 19900405 | AU 1989-44563 19891110 | |
| AU 640113 | B2 | 19930819 | | |
| AU 9211171 | A1 | 19920514 | | |
| AU 9471615 | A1 | 19941222 | AU 1994-71615 19940831 | |
| AU 679085 | B2 | 19970619 | | |
| PRIORITY APPLN. INFO. | : | | US 1984-624854 A 19840626 | |
| | | | US 1985-705272 A 19850225 | |
| | | | US 1985-741972 A 19850610 | |
| | | | EP 1985-107842 A 19850625 | |
| | | | US 1987-26420 A3 19870316 | |
| GI | | | | |
| | | | | |

L62 ANSWER 88 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

103343-75-5 CAPLUS
Carbamic acid, [[5-(2-fluorophenyl)-2,3-dihydro-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

103373-52-0 CAPUS Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl)-, phenylaethyl ester (SCI) (CA INDEX NAME)

103373-53-1 CAPLUS
Carbanic acid, [5-{2-fluorophenyl}-2,3-dibydro-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 88 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

AB 1,4-Benzodiazepines I [n = 1,2; R = H, NO2, CF3, cyano, etc.; R1 = slkyl, alkenyl, carboxyslkyl, aninoalkyl, etc.; Z = 0, S, H2, NH, etc.; R2, R6 = H, OH, Ne; R3 = substituted alkyl; R4 = H, alkyl, acyl, etc.; R5 = H, alkyl, (un) substituted Ph, etc.], which are cholecystokinin (CCK) inhibitors, were prepd. 2-Anino-2'-fluorobenzophenone was treated with tryptophan acid chloride-RCI and NaOH to give benzodiazepinone (R)-II. (R)-II inhibited CCK binding in isolated rat pancreas with an ICSO of c.40 cm.M.

.EU.H. 103343-76-6P

103343-76-6P
RI: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of)
103343-76-6 CAPUS
Carbamic acid, [[5-(2-fluorophenyl]-2,3-dihydro-2-thioxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

103343-40-4P 103343-75-5P 103373-52-0P 103373-53-1P

103373-53-19
RL: SPN (Synthetic preparation): PREP (Preparation)
(prepn. of, as cholecystokinin inhibitor)
103343-40-4 CAPLUS
Carbanic acid, [[S-{2-fluoropheny1}-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 88 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

(Continued)

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1999:135272 CAPLUS CODUMENT NUMBER: 110:135272 THILE:

110:135272
Preparation of benzodiazepines as cholecystokinin and gastrin inhibitors
Evans, Ben E.; Freidinger, Roger H.; Bock, Mark G.
Merck and Co.; Inc., USA
Eur. Pat. Appl., 254 pp.
CODEN: EFXXDV
Patent

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| Intombation. | | | | |
|-----------------------|--------|-----------|----------------------------|----|
| PATENT NO. | KIND | DATE | APPLICATION NO. DATE | |
| EP 284256 | | | | |
| | | 19880928 | EP 1988-302141 198803 | 11 |
| | | 19940601 | | |
| R: AT, BE, | CH, DE | , ES, FR, | GB, GR, IT, LI, LU, NL, SE | |
| US 4820834 | λ | 19890411 | US 1987-26420 198703 | 16 |
| IL 85668 | Al | 19950330 | IL 1988-85668 198803 | |
| AT 106401 | E | 19940615 | AT 1988-302141 198803 | 11 |
| ES 2052704 | T3 | 19940716 | ES 1988-302141 198803 | |
| AU 8813133 | A1 | 19880915 | AU 1988-13133 198803 | |
| DK 8801395 | | 19890106 | | |
| CA 1332411 | | | CA 1988-561493 198803 | 13 |
| | | 19881004 | | |
| JP 3039783 | B2 | | | 16 |
| ZA 8801866 | | | | |
| US 5004741 | | | ZA 1988-1866 198803: | |
| | | 19910402 | | |
| AU 9211171 | ••• | 19920514 | | 21 |
| AU 9471615 | A1 | 19941222 | AU 1994-71615 1994083 | 31 |
| AU 679085 | B2 | 19970619 | | - |
| PRIORITY APPLN. INFO. | : | | US 1987-26420 A 1987031 | 16 |
| | | | US 1984-624854 A2 1984062 | |
| | | | US 1985-705272 A2 198502 | |

US 1985-705272 A2 19850225 US 1985-741972 A2 19850610 EP 1988-302141 A 19880311 CASREACT 110:135272; MARPAT 110:135272 OTHER SOURCE(S):

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

103343-75-5 CAPLUS
Carbamic acid, [[5-(2-fluorophenyl]-2,3-dihydro-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

103373-52-0 CAPLUS
Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

103373-53-1 CAPLUS
Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN

The title compds. [I; R1 = H, alkenyl, (un) substituted alkyl, etc.; R2 = H, alkyl, pyridyl, (un) substituted Ph, etc.; R3 = X11NR18 (CH2) qR16, X11NR18 (CH2) qR16, X11NR18 (CM2) qR16, X11 q = N, X11

0.0000 and 0.17 .mm.H for cholecystokir resp. 103343-40-4P 103343-75-5P 103373-52-0P 103373-53-1P 119487-34-2P 119487-35-3P 119487-40-0P 119487-41-1P 119487-44-4P 119487-53-DP 119487-60-4P 119487-62-6P 119487-63-7P 119506-55-7P 119506-56-8P

119506-57-99
REL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. of, as cholecystokinin and/or gastrin inhibitor)
103443-40-4 CAPLUS
Carbamic acid, [[5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS OD STN (Continued)

119487-34-2 CAPLUS
1H-1,4-Benzodiazepine-1-propanoic acid, 2,3-dihydro-2-oxo-5-phenyl-3[[(phenylmethoxy)carbonyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)

CH2-CH2-C

119487-35-3 CAPLUS
Carbanic acid, [2,3-dihydro-1-[2-(4-methyl-1-piperazinyl)-2-oxoathyl]-2-oxo-5-phenyl-HH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Ph-CH_Z-o-C-

119487-40-0 CAPLUS

| Hilling | Hill

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN Relative stereochemistry. (Continued)

119487-41-1 CAPPUS
1H-1, 4-Benzodiazepine-f-acetic acid, 2,3-dihydro-.alpha.-msthyl-2-oxo-5-phenyl-3-[([phenylmethoxy]carbonyl]anino]-, ethyl ester, (R*,5*)- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

119487-44-4 CAPLUS

Carbanic acid, [1-[2-[diethylamino]-2-cxoethyl]-2,3-dihydro-2-oxo-5-phenyl1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

119487-58-0 CAPLUS
1H-1,4-Benzodiszepine-1-scetic acid, 2,3-dihydro-2-oxo-5-phenyl-3[[(phenylmethoxy)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

119506-55-7 CAPLUS
1H-1,4-Benzodiazepine-1-acetic acid, 2,3-dihydro-.alpha.-methyl-2-oxo-5phenyl-3-[[(phenylmethoxy)carbonyl]amino]- (9CI) (CA INDEX NAME)

119506-56-8 CAPLUS
Carbamic acid, [1-[2-(diethylamino)-1-methyl-2-oxoethyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX NAME)

119506-57-9 CAPLUS
Carbanic acid, [5-(2-fluorophenyi)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yi)-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

119487-61-5
RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in prepn. of cholecystokinin and/or gastrin inhibitors)
119487-61-5 CAPLUS
Carbamic acid, [1-(2-chloro-2-oxoethyl)-2,3-dibydro-2-oxo-5-phenyl-1H-1,4-

Page 93

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

119487-60-4 CAPLUS
Carbanic acid, [2,3-dihydro-2-oxo-1-[2-oxo-2-[(phenylmethyl)anino]ethyl]-5phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester [9CI] (CA INDEX
NAME) RN CN

119487-62-6 CAPL 11948)-62-6 CAPUS Carbanic acid, [1-[2-{GUtylanino}-2-excethyl]-2,3-dihydro-2-exc-5-phenyl-HH-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

119487-63-7 CAPLUS Carbanic acid, [1-[2-(ethylamino)-2-oxoethyl]-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 89 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 90 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1899:91693 CAPLUS
DOCUMENT NUMBER: 110:91693
TITLE: Benzodi azepines assay, tracers,

Benzodiazepines assay, tracers, immanogens and

INVENTOR (S): antibodies
Vang, Nai Yis Keegan, Candace Lindas Heinan, Daniel
Fuelner: Flentge, Charles Arthur: Vang, Philip Fei
Abbott Laboratories, USA
Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

| PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
|-----------------------|--------|-------------|------|-------------------|----------|
| | | | | | |
| EP 264797 | A2 | 19880427 | | EP 1987-114982 | 19871014 |
| EP 264797 | λ3 | 19900207 | | | |
| EP 264797 | B1 | 19960110 | | | |
| R: AT, BE, | CH, DE | , ES, FR, G | B, G | R, IT, LI, LU, NI | ., SE |
| AT 132974 | E | 19960115 | | AT 1987-114982 | 19871014 |
| ES 2084577 | T3 | 19960516 | | ES 1987-114982 | 19871014 |
| AU 8779975 | Al | 19880428 | | AU 1987-79975 | 19871021 |
| AU 604766 | BŽ | 19910103 | | | 130.1021 |
| JP 63246666 | A2 | 19881013 | | JP 1987-269158 | 19871023 |
| JP 06060166 | B4 | 19940810 | | | |
| AU 9169215 | Al | 19910711 | | AU 1991-69215 | 19910107 |
| AU 643490 | B2 | 19931118 | | | |
| PRIORITY APPLN. INFO. | .: | | US | 1986-922595 | 19861024 |
| | | | AU | 1987-79975 | 19871021 |
| OTHER SOURCE(S): | MA | RPAT 110:91 | 693 | | |

Benzodiazepine derivs. I [X = CH, N, C-halogen; R1 = H, Me, RZQ; R2 = H, CH; R3 = O or nonbonding electron pair; R4 = RZQ when R1 = H, Me or R4 = halogen, NOZ, NHZ, NHCOME when R1 = RZQ; R = linking group contg, 0-20 C and heteroatoms (.ltoreq.21), arranged in a straight or branched chain and contg. ltoreq.2 Fings and .ltoreq.2 S or N or 1 O may be linked in sequence; Z = CO, CNH, NH, NHe, NZ, SO2, CHZ; Q = H,

CORPORATE SOURCE:

DOCUMENT TYPE:

LANGUAGE

DOCUMENT TYPE:

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DOCUMENT TYPE:

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DOCUMENT TYPE:

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DOCUMENT SOURCE(S):

CAPLUS COPYRIGHT 2003 ACS on STN

1989:38961 CAPLUS

110:38961

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110:38961

A novel series of 3-substituted 1,4-benzodiazepine, e.g., (R,S)-, (R)-, or (S)-I (R = 4-ClCGHACO, Rl = F; R = 4-ClCGHANHCO, 3-MecGHANHCO, Rl = H) were prepd. as ligands for the receptors of the peptide hormones gastrin and cholecystokinin. E.g., I (R = H, Rl = H) was treated with 3-MecGHANCO to give I (R = 3-MecGHANHCO, Rl = H). These compds, which have high specificity and display nanomolar binding affinity for the gastrin and brain cholecystokinin receptors, represent the first examples of nonpeptidal substances with such a selectivity profile. L-365,260 (R)-I (R = 4-MeCGHANHCO, Rl = H) shows ICSO values of 1.1 mM and 2.0 mM for the gastrin and brain cholecystokinin receptors, resp. The structural features which distinguish these gastrin and centrally selective cholecystokinin ligands from peripheral cholecystokinin antagonists are discussed.

103373-52-0

(deprotaction and reaction with chlorophenyl isocyanate) (deprotaction and reaction with chlorophenyl isocyanate) (33373-52-0 CAPLUS Carbanic acid, [5-(2-fluorophenyl)-2, 3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

ANSVER 90 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) CR, halogen, acyloxy, N-succinimidyloxy, N-phthalimidyloxy, alkoxy, (substituted) phenoxy, N-inidarolyl, 1-benzotriazolyloxy, poly(amino acid) (deriv.), immunogenic carrier, or amino, anido, anidino, (thio) ures, (thio) carbamate, triazinylamino, or (carboxyamino)-sulfonamido deriv. of fluorescence-polarization immunoassay for detg. the presence or ant. of benzodiszepines and their metabolites in a sample. An immunogen was prepd. by coupling 1-carboxymethyl-7-chloro-1,3-dihydro-5-phenyl-ZH-1,4-benzodiszpin-2-one with bovine serum albumin via dicyclohexylcarbodiimide and N-hydroxysuccinimide.

19194-47-7P
RI: RCT (Reactant), SFN (Synthetic preparation), PREF (Preparation), RACT (Reactant or reagent)
(prepn. and reaction of, in synthesis of tracer for fluorescence-polarization immunoassay for benzodiazepines)

119194-47-7 CAPLUS
Carbamic acid, (17-chloro-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)methyl]-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

119215-05-3

RL: RCT (Reactant): RACT (Reactant or reagent)
(reaction of, in synthesis of tracer for fluorescence-polarization
immunoassay for bearodiazepines)
119215-05-3 CAPLUS

1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-1-methyl-2-oxo-5phenyl- (9C1) (CA INDEX NAME)

(Continued) L62 ANSWER 91 OF 106 CAPLUS COPYRIGHT 2003 ACS OD STN

ANSWER 92 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN SSION NUMBER: 1988:94518 CAPLUS MENT NUMBER:

108:94518

AUTHOR (S):

108:94518
Cholecystokinin antagonists. Synthesis and biological evaluation of 4-substituted 4H-[1,2,4]triazolo[4,3-a][1,4]benzodiazepines
Bock, Mark G., DiPardo, Robert M., Evans, Ben E.,
Rittle, Kenneth E., Veber, Daniel F., Freidinger,
Roger M., Chang, Raymond S. L., Lotti, Victor J.
Dep. Med. Chen., Merck Sharp and Dohme Res. Lab., West
Point, FA, 19486, USA
Journal of Medicinal Chemistry (1988), 31(1), 176-81
CODEN: JMCMAR, ISSN: 0022-2623
Journal

DOCUMENT TYPE:

OTHER SOURCE (S):

CORPORATE SOURCE:

English CASREACT 108:94518

4-Substituted 4H-[1,2,4]triazolo[4,3-a][1,4]benzodiazepines I-III (R = H, Me) were prepd. by std. methodol. These compds. were tested in vitro as antagonists of the binding of [1251]cholecystokinin (IV) to rat pancreas and guines pig brain receptors and of the binding of [1251]gastrin to guines pig pastric glands. All compds. proved to have greater affinity for the peripheral IV receptor with some analogs having IC50's in the subnanceolar range. In vivo activity of selected compds. in mice is presented and the structure/activity profile of this class of benzodiazepines as IV antagonists is discussed.

10195-69-39 146135-16-2P
RL: RCT (Reactant): SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and cyclization of, with orthoesters)

ANSWER 92 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Contin Carbamic acid, [5-(2-fluorophenyl)-2,3-dibydro-2-thioxo-HR-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME) (Continued)

103373-52-0 108895-98-3
RL: RCT (Reactant): RACT (Reactant or reagent)
 (thiolation of, with Lawessons reagent)
103373-52-0 CAPLUS
Carbamic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiszepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

108895-98-3 CAPLUS Carbamic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

ANSWER 92 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) 103195-69-3 CAPLUS Carbanic acid, [5-{2-fluorophenyl}-2-bydrazino-3H-1,4-benzodiarepin-3-yl}-, phenylmathyl ester (9CI) (CA INDEX NAME)

146135-16-2 CAPLUS Carbanic acid, (2-hydrazino-5-phenyl-3H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

ΙT

146135-15-1P
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (preps. and deprotection of)
146135-15-1 CAPIUS
Carbanic acid, (2,3-dihydro-5-phenyl-2-thioxo-1H-1,4-benzodiazepin-3-yl}-, phenylaethyl ester (9CI) (CA INDEX NAME)

103373-53-1P

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) [prepn. and hydrazinolysis of] 103373-53-1 CAPLUS

SLG ANSWER 93 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ASCRISION NUMBER: 1987;598272 CAPLUS
FULL: 107:198272
AUTHOR(S): An expedient synthesis of 3-anino-1,3-dihydro-5-phenylZH-1,4-benzodiazepin-2-one
Bock, Mark Gr, DiPardo, Robert H., Evans, Ben E.;
Rittle, Kenneth E.; Veber, Daniel F.; Freidinger,
Roger H.
CORPORATE SOURCE: Werck Sharp Dohme Res. Lab., West Point, PA, 19486,
USA
COURCE. Tetrahedron Letters (1987), 28(9), 939-42

USA Tetrahedron Letters (1987), 28(9), 939-42 CODEN: TELEAY: ISSN: 0040-4039 Journal English CASREACT 107:198272

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

Racemic title compd. I was prepd. in 4 steps from 2-H2NCGH4COPh, which was converted to 2-PhCCGH4NHCOCHNHCO2CH2Ph (II, R = SCHMe2) (III), followed by the novel H9+2 ion assisted displacement of the alkylthic group of III by NH3 to give II (R = NH2), cyclization, and catalytic hydrogenation, to give I in 55-60% overall yield.

108895-98-3P
RL: SPN (Synthetic preparation), PREP (Preparation)
(prepn. and catalytic hydrogenation of, aminobenzodiazepinone from)
108895-98-3 CAPLUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)



ANSVER 94 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN 25510N NUMBER: 1987:515571 CAPLUS 107:115571

107:115571
Synthesis and resolution of 3-amino-1,3-dihydro-5phenyl-2H-1,4-benzodiazepin-2-ones
Bock, Mark G., DiPardo, Robert M.; Evans, Ben E.;
Rittle, Kenneth E.; Veber, Daniel P.; Freidinger,
Roger M.; Hirshfield, Jordan: Springer, James P.
Merck Sharp and Dohne Res. Lab., West Point, PA,
19486, USA
Journal of Organic Chemistry (1987), 52(15), 3232-9
CODEN: JOCEAH; ISSN: 0022-3263
Journal AUTHOR (S): CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE (S): CASREACT 107:115571

Two efficient synthetic routes to the 3-amino-1,4-benzodiazepin-2-ones I
(R - H, Me) were developed. The first sequence was carried out in 55-60%
overall yield and involved a novel Hg2+ assisted NH3 displacement of the
(alkylthio)qlycineamide, 2-phocoGHNHICOCH,PNIROCCHEPNIR [III; RI = SCHNe2],
to produce the key intermediate .alpha.-aminoqlycinamide II (RI = NH2),
The second approach features a practical two-step amination of the parent
1,4-benzodiazepine ring system to afford the title compd. I (R = Me) in
49% overall yield from 2-aminobenzophenone. I (R = Me) was resolved via
the sepn. of the corresponding disaterioameric phenylalaninamides. The
desired (-)-I (R = Me) was then liberated by use of the Edman degrdn.
108895-98-3p
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and deprotection of)
108895-98-3 CAPUS
Carbanic acid, (2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-,
phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 95 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:84662 CAPLUS
DOCUMENT NUMBER: 106:84662
TITLE: 3-(Accelerate)

106:84662
3-(Acylamino)benzodiazepines as cholecystokinin inhibitors
Bock, Mark G.; Veber, Daniel F.; DiPardo, Robert M. Herck and Co., Inc., USA
U.S., 6 pp.
CODEN: USKXAM INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

English

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 4628084
PRIORITY APPLN. INFO.: ----A US 1986-815620 US 1986-815620 19861209 19860102 19860102

The title compds. [I: Rl = H, Cl-6 alkyl, CH2COZH, alkoxycarbonylmethyl: R2 = Cl-6 alkyl, aralkyl, alkoxy, aralkoxy, (substituted) aryl, indolyl: R3, R4 = H, halo] were prepd. as cholecystokinin inhibitors (no data). Thus, Me2CHSCR(COZH)NHCOZCHZPh was condensed with 2-HZNCGHGOZh to give glycinamid deriv. II. II was desulfurized and aminated with HgCl2-HH3 and the product cyclized to afford I (Rl = H, R2 = OCH2Ph, R3 = R4 = H). 103373-52-09 105649-47-2P 105649-48-19.

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as cholecystokinin inhibitor) 103373-52-0 CAPLUS

Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Page 96

L62 ANSWER 94 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L62 ANSWER 95 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

106849-47-2 CAPLUS

Carbamic acid, (2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

106849-48-3 CAPLUS Carbamic acid, (5-(2-fluorophenyl)-2,3-dihydro-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

108895-98-3 CAPLUS Carbanic acid, (2.3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-y1)-, phenylaethyl ester (9CI) (CA INDEX NAME)

ANSVER 96 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
1987:67359 CAPLUS
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106:6735 ANSVER 96 OF ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

DOCUMENT TYPE: LANGUAGE: PATENT INFORMATION:

INVENTOR (5): PATENT ASSIGNEE (S): SOURCE:

PATENT NO. KIND DATE EP 167919 AZ 19860115 EP 1985-107842
R: AT, EE, CH, DE, FR, GB, IT, LI, LU, NI, SE
PRIORITY APPLN. INFO:
US 1984-624654
US 1985-705272
US 1985-741972 APPLICATION NO. DATE 19850625 19840626

1,4-Benzodiazepines I [n = 1,2; R = H, NO2, CF3, cyano, etc.; R1 = alkyl, alkenyl, carboxyalkyl, aninoalkyl, etc.; Z = 0, S, HZ, NH, etc.; R2 and R6 are H, OH, Mer R3 = substituted alkyl; R4 = H, alkyl, acyl, etc.; R5 = H, alkyl, (un)substituted Ph. etc.], which inhibited cholecystckinin, were prepd. 2-Aninophenyl 2-fluorophenyl ketone was teated with tryptophan and chloride hydrochloride and NaOH to give henzodiazepinone deriv. II. 103343-40-49 103343-75-59 103373-52-09

103373-53-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as cholecystokinin inhibitor;
103343-40-4 CAPLUS
103343-40-4 CAPLUS
Carbanic acid, [[5-{2-fluorophenyl}-2,3-dibydro-2-oxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 96 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

103343-76-6
RL: RCT (Reactant), RACT (Reactant or reagent)
(reaction of)
103343-76-6
CAPLUS
Carbanic acid, ([5-(2-fluorophenyl)-2,3-dihydro-2-thioxo-1H-1,4-benzodiazepin-3-yl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 96 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

103343-75-5 CAPLUS Carbanic acid, [[5-(2-fluorophenyl)-2,3-dihydro-1H-1,4-benzodiazepin-3-yl]mathyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

103373-52-0 CAPLUS Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-lH-1,4-benzodiazepin-3-yl]-, phenylmathyl ester (9CI) (CA INDEX NAME)

103373-53-1 CAPLUS
Carbamic acid, [5-(2-fluorophenyl]-2,3-dihydro-2-thioxo-1H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (9CI) (CA INNEX NAME)

Lorent Assignments of the Captus Copyright 2003 ACS on STN
AM ESSION NUMBER: 1986:442853 CAPTUS
COMENT NUMBER: 105:42853 CAPTUS
TITLE: 105:42853
Triazolobenzodiazepines and pharmaceutical compositions containing them
Compositions containing them
Freidinger, Roger M. / Bock, Mark G. / Evans, Ben E.
BUT. Pat. Appl. 117 pp.
CODEN: TYPE: Pat. Appl. 117 pp.
CODEN: EPSXIW

COUNT: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--------------------------|---|--|--|
| EP 169392 EP 169392 | A2 A3 | 19860129 19861105 | EP 1985-107843 | 19850625 |
| R: AT, BE, US 4663321 DX 8502870 ES 544521 JP 61030589 ES 557126 PRIORITY APPLN. INFO. OTHER SOURCE(S): | A A A1 A2 A1 | FR, GB, 19870505 19860305 19870416 19860212 19870816 | US 1985-741971 DK 1985-2870 ES 1985-544521 JP 1985-138062 ES 1986-557126 US 1984-624850 US 1985-741971 | 19850610 19850625 19850625 19850626 19861001 19940626 19850610 |

Title compds. I (R1 = H, OH, hydrocarbyl; R2, R6 = H, OH, Me; R3 = substituted alkyl, substituted anino; R4 = H, alkyl, acyl, etc.; R5 = H, alkyl, Ph, etc.; n = 1,2), which showed cholecystokinin inhibitor activity, were prepd. A 1,4-benzodiazepin-2-one hydrazone deriv. vas treated with MeC(OEt.)3 to give triazolobenzodiazepine deriv. II. 03193-69-39 103373-53-19
RI: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction of) 103195-69-3 CAPUS
Carbanic acid, [5-(2-fluorophenyl)-2-bydrazino-3H-1,4-benzodiazepin-3-yl]-, phenylmethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 97 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued) на-ин

103373-53-1 CAPLUS
Carbanic acid, {5-{2-fluorophenyl}-2,3-dihydro-2-thioxo-1H-1,4-benzodiazepin-3-yl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

ΙT 103373-52-0

103373-52-0
RE: RCT (Reactant); RACT (Reactant or reagent)
(reaction of)
103373-52-0 CAPLUS
Carbanic acid, [5-(2-fluorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazepin-3-yl)-, phenylnethyl ester (9CI) (CA INDEX NAME)

L62 ANSWER 98 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

• HCI

L62 ANSWER 98 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1975:156233 CAPLUS
DOCUMENT NUMBER: 82:156233
Synthesis and central nervous effects of some
3-substituted 1,4-benzediazepin-2-ones
AUTHOR(S): Hamphisi, E., Salimbeni, A.
CORRORATE SOURCE: Bollettino Chimico Farmaceutico (1974), 113(12), 642-4
CODEN: BOTALI, ISSN: 0006-6648
JOURNAL LANGUAGE: LANGUAGE: LANGUAGE: Bollettino Chimico Farmaceutico (1974), 113(12), 642-4
CODEN: BOTALI, ISSN: 0006-6648
JOURNAL LANGUAGE: LANGUAGE: LANGUAGE: LANGUAGE: Agains 5-chlorobenzophenone with diethyl aspartate hydrochloride in the presence of pyridine gave I (R = 02t), which on sapon, gave I (R = 02t), which on the sapon gave I (R = 02t), which on sapon gave I (R = 02t), which on sapon gave I (R = 02t). This was converted to the acid chloride with PCIS aspans gave I (R = 02t). Which on sapon ga

●2 K

55108-24-2 CAPLUS IH-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

55108-27-5 CAPLUS
1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-,
monohydrochloride (9CI) (CA INDEX NAME)

L62 ANSWER 99 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1574:105318 CAPLUS
80:105318
Stereochemistry of the enzymic 3-hydroxylation of 1.3-dihydro-22H-1,4-benzodiazepin-2-ones
Corporate Source:
SOURCE:
CORPORATE SOURCE:
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
Lab. Chin. Org., Univ. Milano, Hilan, Italy
Journal of the Chemical Society, Chemical
Communications (1973), (19), 721-2
CODEN: JOCCAT, ISSN: 0022-4936
Journal
English

L62 ANSVER 100 OF 106 CAPLUS COFYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1973:537109 CAPLUS
DOCUMENT NUMBER: 79:137109
CUITAZOLIERS and 1,4-benzodiazepines. LIX.
Preparation of pyrrolo[2,1-c]-1,4-benzodiazepines
Valser, Armin Silvernan, Gladys: Fryer, R. Ian
Chen. Res. Dep.. McGrann-La Roche Inc., Nutley, NJ,
USA. 9:100-2.

SOURCE:

Journal of Organic Chemistry (1973), 38 (20), 3502-7

DOCUMENT TYPE:
JOURNAL JOCEAN, ISSN: 0022-3263

LANGUAGE:
English

For diagram(s), see printed CA Issue.
Substituted 7-chloro-5,10-dhlydro-5-phenyl-1H-pyrrolo[2,1-c][1,4]bearodiszepines (1) were obtained from treatment of the corresponding 3-allylbearodiszepine 4-oxides (II) with Ac20.

II 40973-81-7

RL: RCT (Reactant); RACT (Reactant or reagent)

RE: RUT (Reactant); RAUT (Rescuent of Teagent, (redn. of)
(redn. of)
40973-81-7 CAPLUS
1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-1-methyl-2oxo-5-phenyl-, methyl ester, 4-oxide (9CI) (CA INDEX NAME)

ANSWER 102 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN SSION NUMBER: 1970:499000 CAPLUS 73:99000

73:99000
Physiologically active 3-carbonylaminoacetic acid ethyl ester substituted benzodiazepines
Fryer, R. Ian: Sternbach, Leo H., Earley, James V.
Hoffman-La Roche Inc. INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

U.S., 4 pp. CODEN: USXXAM Patent English DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

10 3520877 A 19700721 US 1967-671959 19671002

PRIORITY APPLN. INFO:

US 1967-671959 19671002

AB The title compds. useful as swdatives psychosedatives, muscle relaxants and anticonvulsants are prepd. by treating a 2-aminobenzophenome with an amino substituted dibasic acid. Thus, a mixt. 2-amino-5-chlorobenzophenome pyridine and di-Et aminomalonate-HCl was refluxed 18 hr to give a mixt. of Et 7-chloro-1,3-dhlydro-2-oxo-5-phenyl-1,4-benzodiazepin-2-one (II) and Et 7-chloro-5-phenyl-1,3 (ZH)-dhlydro-1,4-benzodiazepin-2-one (II) and Et 7-chloro-5-phenyl-1,3 (ZH)-dhlydro-1,4-benzodiazepin-3-ylcarbonylaminoacetate (III). A mixt. I, pyridine and di-Et smallomale-MCl was refluxed 36 hr to give III.

2653-20-3e Captus

(Prepn. of)

RN 2553-20-3e Captus

CN Glycine, N-{(7-chloro-2,3-dihydro-2-oxo-5-phenyl-1,4-benzodiazepin-3-yl) carbonyl-1, ethyl ester (SCI) (CA INDEX NAME)

L62 ANSWER 101 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1372:405544 CAPJUS
77:5544
[(2-Benzoylphenylcarbamoyl)methyl] hydromycarbamic acid, ethyl ester, and ethyl carbonate
acid, ethyl ester, and ethyl carbonate
bell, Stanley C.
American Home Products Corp.
U.S. 3 pp. Division of U.S. 3,489,747 (CA
72/79115)].
COEDN: USDOKAM
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 3652634 A 19720328 US 1969-852135 19690623

PRIORITY APPLM. INFO.: US 1969-852135 19690623

GI For diagram(s), see printed CA Issue.

A8 (2-Benzoy1-4-chloropheny1-carbamoy1) methul) hydroxycarbamic acid ethyl ester ethyl carbonate (1) was prepd. by the reaction of ClOOZEt (11) with ({2-amino-5-chloro-alpha-phenylbenzylidene|samino|acetic acid N-oxide. I was also prepd. by the reaction of II with 5-chloro-2-{2-12-chloro-1, 3-dihydro-5-phenyl-2H-1,4-benzodizepin-2-one-3-carbamic acid ethyl ester (III).

IT 14789-64-10 (III).

RN 14789-64-10 (APPLIS

RN 1578-64-1 CAPLIS

CN Carbamic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodizepin-3-yl)-, ethyl ester (9CI) (CA INDEX NAME)

<u>; </u>

L62 ANSWER 103 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1970:464862 CAPLUS
DOCUMENT NUMBER: 73:64862
TITLE: Pharmacological screening of new benzodiszepines in

DOCUMENT NUMBER: 73:64862

AUTHOR(S): DATE of Pharmacological screening of new benzodiazepines in mice

AUTHOR(S): SOURCE: Taked Chem. Ind., Ltd., Osaka, Japan

Takeda Chem. Ind., Ltd., Osaka, Japan

Takeda Kenkyusho Ho (1970), 29(1), 134-44

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Taming, muscle relaxing, anticonvulsive, barbiturate anesthesiapotentiating, analgesic, and acute toxic effects of twenty-seven 1,3, and
(or) 7-substituted benzodiazepine (I) were studied mice. Used I were
(R1, R2, and R3 given): Cl, Me, H (diazepam) (II), Cl, H, H, Cl, CONNHO, H, Cl,
(III), Cl, CONNEL, H, Cl, CONNHO, H, Cl, CL, CLECHO, H, Cl, CL, CLECHO, H, Cl, CL, CL, H, CL, CL

L62 ANSWER 104 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1970:79115 CAPLUS
1970:7911

PATENT NO. KIND DATE APPLICATION NO. DATE

US 3489747 A 19700113 US 1956-528623 19560218

PRIORITY APPLM. INFO.: US 1956-528623 19560218

Of For diagram(s), see printed CA Issue.

A The title compd. (I) was prepd. by treating 5-chloro-2-amino-.alpha.-phenyl-benrylideneaminoacetic acid N-oxide (II) or 2-12(hydroxyamino) acetamido]-4-chlorobenzophenone vith ClCO2Et to give III,
which cyclized with NN3 gave I. Thus, 4 g II, 25 ml CHC13, and 25 ml
ClCO2Et was refluxed 2hr to give 1.9 g III, a. 101-2.degree. III was
added to aq. NN3-ECOH and the mixt. boiled to half vol. to give I, n.
system depressant activity.

II 14789-64-19

RL: SPN (Synthetic preparation)

RL: SPN (Synthetic preparation): PREP (Preparation)

(prepn. of)
14789-64-1 CAPLUS
Carbanic acid, (7-chloro-2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, ethyl ester (9CI) (CA INDEX NAME)

AUTHOR(S): CORPORATE SOURCE: SOURCE:

101 Joh

22 ANSWER 105 OF 106
ACCESSION NUMBER:
DOCUMENT NUMBER:
1968:436091 CAPLUS
1968:436091 CAPLUS
1971 CAPLUS
1971 CAPLUS
1972 CAPLUS
1972 CAPLUS
1973 CAPLUS
1974 CAP

SOURCE:

Journal of Medicinal Chemistry (1968), 11(3), 457-61
CODEN: JONCHAR ISSN: 0022-2623

DOCUMENT TYPE:

Journal
LANGUACE:

English

AB The preps of a no. of 1,4-benzodiazepines substituted in the 3 position is described. The rearrangement of 7-chloro-1,3-dibydro-5-phenyl-2H-1,4-benzodiazepin-2-one 4-oxide with discevtly sulfide yields largely the 3-acetylchio compd. Anines, ethers, and sulfides were prepd. through the chloro intermediate. A 3-acetylcharcodiazepine was prepd. and converted into oxazepam. The pharmacol. test data of new and previously published compds. are given.

IT 14789-64-12 18879-49-49

RL: SYN (Synthetic preparation); PREP (Preparation)
(prepn. of)

N1 14789-64-1 CAPIUS

NN 14789-64-1 CAPIUS

CN Carbanic acid, (7-chloro-2,3-dibydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, ethyl ester (9CI) (CA INDEX NAME)

18878-49-4 CAPLUS 1H-1,4-Benzodiazepine-3-carbanic acid, 1-carboxy-7-chloro-2,3-dihydro-2-oxo-5-phenyl-, diethyl ester (8CI) (CA INDEX NAME)

ANSWER 106 OF 106 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1968:59551 CAPLUS
DOCUMENT NUMBER: 68:59551
TILE: Rearrangement of a 2-aminobenzyli

68:59551
Rearrangement of a 2-aminobenzylideneamino-acetic acid N-oxide with ethyl chloroformate
Bell, Stanley Charles
Wyeth Lab., Inc., Radnor, PA, USA
Journal of Organic Chemistry (1968), 33(2), 828-30
CODEN: JOCEAH; ISSN: 0022-3263
Journal

JOURNAL OF UFGABLE CHEMISTRY (1904), SEED SOURCES JOURNAL OF UFGABLE CHEMISTRY (1904), SEED SOURCES JOURNAL SOURCES JOURNAL LANGUAGE:

For diagram(s), see printed CA ISSUE.
AB A mixt. of .alpha-(2-amino-5-chloro-.alpha.-phenyl-benzylideneanino)acetic acid N-oxide, C1COZEt, and CHC13 is refluxed and neutralized with HN31 to give thyl 7-chloro-1,3-dihydro-2-oxo-5-phenyl-2H-1,4-benzodiazepine-3-carbamate (11). Paulralization with NaOH gives 4,2-c1BzcGH3NCCOCH(OXINNCOCH (DX) INCOCH (11). 2-Benzoyl-4-chloro-.alpha-(N-ethoxycarbonyl-N-ethoxycarbonyloxyamino)acetaniled(III) is prepd. and treated with NaOH. See July 1 and III are given.

N.H.R. data for II and III are given.

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
(prepn. of)
RN 14789-64-1P (APLUS
CN Carbamic acid, (7-chloro-2,3-dihydro-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-, ethyl ester (SCI) (CA INDEX NAME)